SCHOTT
glass made of ideas

Optical Glass

Datasheets

Table of Content

[1)] Glass suitable for Precision Molding

Explanations

Refractive indices

The refractive indices n are listed for a maximum of 23 wavelengths in the range between 248.2 nm and 2325.4 nm.

Constants of the dispersion formula

From the Sellmeier dispersion formula

$$n^2(\lambda) - 1 = \frac{B_1\,\lambda^2}{\lambda^2 - C_1} + \frac{B_2\,\lambda^2}{\lambda^2 - C_2} + \frac{B_3\,\lambda^2}{\lambda^2 - C_3}$$

the refractive indices for any wavelength within the range from the near UV to 2.3 µm can be calculated with the help of the constants B_1, B_2, B_3, and C_1,C_2,C_3.

When calculating the refractive index using the Sellmeier coefficients from the SCHOTT data sheets, the wavelength λ needs to be entered in units of µm.

Constants of the formula dn/dT

The temperature dependence of the refractive index can be calculated using the following formula:

$$\frac{dn_{abs}(\lambda, T)}{dT} = \frac{n^2(\lambda, T_0) - 1}{2\,n(\lambda, T_0)} \left(D_0 + 2\,D_1\,\Delta T + 3\,D_2\,\Delta T^2 + \frac{E_0 + 2\,E_1\,\Delta T}{\lambda^2 - \lambda^2_{TK}} \right)$$

The constants are valid for a temperature range from -100°C to +140°C and a wavelength range from 0.365 µm to 1.014 µm. The temperature coefficients in the data sheets are guideline values.

Temperature coefficient of refraction

$\Delta n_{rel} / \Delta T$ referring to air at normal pressure 1013.3 mbar
$\Delta n_{abs} / \Delta T$ referring to vacuum

Internal transmittance τ_i

The internal transmittance in the wavelength range between 250 nm and 2500 nm is listed for thickness of 10 and 25 mm. The internal transmittance and color code listed in the data sheet represent median values from several melts of one glass type. For HT and HTultra grade, the internal transmittance in the visible spectrum includes guaranteed minimum values.

Color code

The color code lists the wavelength λ_{80} and λ_5 at which the transmittance is 0.80 and 0.05 at 10 mm thickness. The values are rounded off to 10 nm and denoted by eliminating the first digit. For high index glass types with nd>1.83, the data of the color codes (marked by *) refers to the transmittance values 0.70 and 0.05 (λ_{70} and λ_5).

Relative partial dispersion

The relative partial dispersions P_{xy} and P'_{xy} for the wavelengths x and y are derived from the equations.

$$P_{xy} = \frac{n_x - n_y}{n_F - n_C} \text{ und } P'_{xy} = \frac{n_x - n_y}{n_{F'} - n_{C'}}$$

Deviation of the relative partial dispersion from the "normal line" ΔP

The term ΔP_{xy} quantitatively describes a deviation relation of the dispersion from the "normal glasses".

Other characteristics

$\alpha_{-30/+70}$	=	The coefficient of thermal expansion in the temperature range between – 30°C und + 70°C in 10^{-6}/K
$\alpha_{20/300}$	=	The coefficient of linear thermal expansion in the temperature range between + 20°C und + 300°C in 10^{-6}/K
Tg	=	Transformation temperature in °C
$T_{10^{13.0}}$	=	Temperature of the glass in °C at a viscosity of 10^{13} dPa·s
$T_{10^{7.6}}$	=	Temperature of the glass in °C at a viscosity of $10^{7.6}$ dPa·s
c_p	=	average specific heat capacity in J/(g·K)
λ	=	Thermal conductivity in W/(m·K)
AT*	=	Yield point/sag temperature in °C
ρ	=	Density in g/cm^3
E	=	Elasticity modulus in 10^3 N/mm^2
μ	=	Poisson's ratio
K	=	Stress optical coefficient in 10^{-6} mm^2/N
HK	=	Knoop hardness
HG	=	Grindability class (ISO 12844)
Abrasion Aa*	=	Grindability according to JOGIS**
CR	=	Climatic resistance Resistance to moisture in the air expressed in CR classes 1 (high) to 4 (low).
FR	=	Stain resistance Resistance to stain formation expressed in FR classes 0 (high) to 5 (low).
SR	=	Acid resistance Resistance to acid solutions expressed in SR classes 1 (high) to 4 (low) and 51 to 53 (very low).
AR	=	Alkali resistance Resistance to alkaline solutions expressed in AR classes 1 (high) to 4 (low).
PR	=	Phosphate resistance Resistance to alkaline phosphate containing solutions expressed in PR classes 1 (high) to 4 (low).
SR-J*	=	Acid resistance class according to JOGIS**
WR-J*	=	Water resistance class according to JOGIS**

* only precision molding glasses

** JOGIS = Japanese Optical Glass Industrial Standards

Datasheet

SCHOTT
glass made of ideas

FK5HTi
487705.245

n_d = 1.48748	ν_d = 70.47	$n_F - n_C$ = 0.006918
n_e = 1.48913	ν_e = 70.29	$n_{F'} - n_{C'}$ = 0.006959

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.46180
$n_{1970.1}$	1970.1	1.46738
$n_{1529.6}$	1529.6	1.47312
$n_{1060.0}$	1060.0	1.47855
n_t	1014.0	1.47912
n_s	852.1	1.48137
n_r	706.5	1.48409
n_C	656.3	1.48534
$n_{C'}$	643.8	1.48568
$n_{632.8}$	632.8	1.48600
n_D	589.3	1.48742
n_d	587.6	1.48748
n_e	546.1	1.48913
n_F	486.1	1.49225
$n_{F'}$	480.0	1.49264
n_g	435.8	1.49591
n_h	404.7	1.49892
n_i	365.0	1.50398
$n_{334.1}$	334.1	1.50935
$n_{312.6}$	312.6	1.51423
$n_{296.7}$	296.7	1.51861
$n_{280.4}$	280.4	1.52409
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.909362180
B_2	0.279077054
B_3	0.891813298
C_1	0.005201425
C_2	0.0158938446
C_3	95.91094480

Constants of Formula for dn/dT

D_0	-7.47E-06
D_1	1.58E-08
D_2	-1.23E-11
E_0	3.58E-07
E_1	4.03E-10
λ_{TK} [µm]	0.164

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.680	0.390
2325	0.830	0.630
1970	0.971	0.930
1530	0.986	0.965
1060	0.999	0.998
700	0.999	0.997
660	0.998	0.995
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.998	0.994
460	0.998	0.995
436	0.998	0.996
420	0.999	0.997
405	0.999	0.997
400	0.999	0.997
390	0.999	0.997
380	0.998	0.996
370	0.999	0.996
365	0.998	0.996
350	0.998	0.994
334	0.996	0.989
320	0.992	0.979
310	0.983	0.958
300	0.959	0.900
290	0.900	0.760
280	0.760	0.510
270	0.550	0.220
260	0.300	0.050
250	0.120	0.000

Color Code

λ80 / λ5	29/25

Remarks

i-line glass

Relative Partial Dispersion P

$P_{s,t}$	0.3253
$P_{C,s}$	0.5742
$P_{d,C}$	0.3098
$P_{e,d}$	0.2388
$P_{g,F}$	0.5288
$P_{i,h}$	0.7315

Relative Partial Dispersion P'

$P'_{s,t}$	0.3234
$P'_{C',s}$	0.6203
$P'_{d,C'}$	0.2584
$P'_{e,d}$	0.2374
$P'_{g,F'}$	0.4703
$P'_{i,h}$	0.7271

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0202
$\Delta P_{C,s}$	0.0070
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0036
$\Delta P_{i,g}$	0.0321

Chemical Properties

CR	2
FR	1
SR	4
AR	2
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.0
T_g [°C]	466
$T_{10^{13}}$ [°C]	469
$T_{10^{7.6}}$ [°C]	672
c_p [J/(g*K)]	0.808
λ [W/(m•K)]	0.925
ρ [g/cm³]	2.45
E [10^3 N/mm²]	62
µ	0.232
K [10^{-6} mm²/N]	2.91
$HK_{0.1/20}$	520

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-1.6	-1.2	-0.9	-3.6	-3.3	-3.0
+20/+40	-1.5	-1.1	-0.7	-2.7	-2.4	-2.0
+60/+80	-1.3	-0.8	-0.4	-2.3	-1.8	-1.5

Datasheet

SCHOTT
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N-FK5
487704.245

n_d = 1.48749	ν_d = 70.41	$n_F - n_C$ = 0.006924
n_e = 1.48914	ν_e = 70.23	$n_{F'} - n_{C'}$ = 0.006965

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.46181
$n_{1970.1}$	1970.1	1.46738
$n_{1529.6}$	1529.6	1.47312
$n_{1060.0}$	1060.0	1.47855
n_t	1014.0	1.47912
n_s	852.1	1.48137
n_r	706.5	1.48410
n_C	656.3	1.48535
$n_{C'}$	643.8	1.48569
$n_{632.8}$	632.8	1.48601
n_D	589.3	1.48743
n_d	587.6	1.48749
n_e	546.1	1.48914
n_F	486.1	1.49227
$n_{F'}$	480.0	1.49266
n_g	435.8	1.49593
n_h	404.7	1.49894
n_i	365.0	1.50401
$n_{334.1}$	334.1	1.50939
$n_{312.6}$	312.6	1.51428
$n_{296.7}$	296.7	1.51867
$n_{280.4}$	280.4	1.52415
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.844309338
B_2	0.344147824
B_3	0.910790213
C_1	0.004751120
C_2	0.0149814849
C_3	97.86002930

Constants of Formula for dn/dT

D_0	-7.24E-06
D_1	1.58E-08
D_2	-9.51E-12
E_0	3.51E-07
E_1	4.61E-10
λ_{TK} [µm]	0.156

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.680	0.380
2325	0.830	0.630
1970	0.971	0.930
1530	0.986	0.965
1060	0.999	0.998
700	0.998	0.995
660	0.996	0.991
620	0.996	0.990
580	0.996	0.991
546	0.996	0.991
500	0.996	0.989
460	0.996	0.990
436	0.997	0.992
420	0.997	0.993
405	0.998	0.994
400	0.998	0.994
390	0.998	0.994
380	0.996	0.991
370	0.997	0.992
365	0.997	0.992
350	0.995	0.988
334	0.991	0.977
320	0.980	0.950
310	0.954	0.890
300	0.900	0.760
290	0.760	0.500
280	0.500	0.180
270	0.220	0.020
260	0.060	0.000
250	0.000	

Color Code

λ80 / λ5	30/26

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3252
$P_{C,s}$	0.5740
$P_{d,C}$	0.3097
$P_{e,d}$	0.2388
$P_{g,F}$	0.5290
$P_{i,h}$	0.7319

Relative Partial Dispersion P'

$P'_{s,t}$	0.3232
$P'_{C',s}$	0.6201
$P'_{d,C'}$	0.2584
$P'_{e,d}$	0.2374
$P'_{g,F'}$	0.4704
$P'_{i,h}$	0.7276

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0202
$\Delta P_{C,s}$	0.0070
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0036
$\Delta P_{i,g}$	0.0322

Chemical Properties

CR	2
FR	1
SR	4
AR	2
PR	2.3
SR-J	5
WR-J	4

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.0
T_g [°C]	466
$T_{10^{13}}$ [°C]	469
$T_{10^{7.6}}$ [°C]	672
c_p [J/(g*K)]	0.808
λ [W/(m•K)]	0.925
AT [°C]	557
ρ [g/cm^3]	2.45
E [10^3 N/mm^2]	62
µ	0.232
K [10^{-6} mm^2/N]	2.91
$HK_{0.1/20}$	520
HG	3
Abrasion Aa	109

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-1.5	-1.2	-0.9	-3.5	-3.2	-2.9
+20/+40	-1.4	-1.0	-0.6	-2.6	-2.3	-2.0
+60/+80	-1.2	-0.7	-0.3	-2.2	-1.8	-1.4

Datasheet

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N-FK51A
487845.368

n_d = 1.48656	ν_d = 84.47	$n_F - n_C$ = 0.005760
n_e = 1.48794	ν_e = 84.07	$n_{F'} - n_{C'}$ = 0.005804

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.46958
$n_{1970.1}$	1970.1	1.47271
$n_{1529.6}$	1529.6	1.47608
$n_{1060.0}$	1060.0	1.47959
n_t	1014.0	1.47999
n_s	852.1	1.48165
n_r	706.5	1.48379
n_C	656.3	1.48480
$n_{C'}$	643.8	1.48508
$n_{632.8}$	632.8	1.48534
n_D	589.3	1.48651
n_d	587.6	1.48656
n_e	546.1	1.48794
n_F	486.1	1.49056
$n_{F'}$	480.0	1.49088
n_g	435.8	1.49364
n_h	404.7	1.49618
n_i	365.0	1.50046
$n_{334.1}$	334.1	1.50501
$n_{312.6}$	312.6	1.50911
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.971247817
B_2	0.216901417
B_3	0.904651666
C_1	0.004723020
C_2	0.0153575612
C_3	168.68133000

Constants of Formula for dn/dT

D_0	-1.83E-05
D_1	-7.89E-09
D_2	-1.63E-12
E_0	3.74E-07
E_1	3.46E-10
λ_{TK} [µm]	0.150

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.89	0.75
2325	0.93	0.84
1970	0.996	0.989
1530	0.996	0.990
1060	0.998	0.994
700	0.998	0.995
660	0.998	0.995
620	0.998	0.996
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.997	0.993
436	0.997	0.992
420	0.997	0.992
405	0.997	0.993
400	0.997	0.993
390	0.997	0.992
380	0.995	0.988
370	0.990	0.976
365	0.985	0.963
350	0.95	0.88
334	0.83	0.63
320	0.62	0.30
310	0.43	0.12
300	0.26	0.04
290	0.14	0.01
280	0.06	
270		
260		
250		

Color Code

λ80 / λ5	34/28

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2879
$P_{C,s}$	0.5465
$P_{d,C}$	0.3062
$P_{e,d}$	0.2388
$P_{g,F}$	0.5359
$P_{i,h}$	0.7429

Relative Partial Dispersion P'

$P'_{s,t}$	0.2858
$P'_{C',s}$	0.5909
$P'_{d,C'}$	0.2554
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4759
$P'_{i,h}$	0.7373

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.1112
$\Delta P_{C,s}$	-0.0533
$\Delta P_{F,e}$	0.0110
$\Delta P_{g,F}$	0.0342
$\Delta P_{i,g}$	0.1675

Chemical Properties

CR	1
FR	0
SR	52.3
AR	2.2
PR	4.3
SR-J	3
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	12.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	14.8
T_g [°C]	464
$T_{10^{13}}$ [°C]	463
$T_{10^{7.6}}$ [°C]	527
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.760
AT [°C]	503
ρ [g/cm^3]	3.68
E [10^3 N/mm^2]	73
µ	0.302
K [10^{-6} mm^2/N]	0.63
$HK_{0.1/20}$	345
HG	6
Abrasion Aa	528

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-4.9	-4.6	-4.3	-6.9	-6.6	-6.4
+20/+40	-6.0	-5.7	-5.3	-7.3	-7.0	-6.7
+60/+80	-6.5	-6.2	-5.8	-7.5	-7.2	-6.9

Datasheet

N-FK58
456909.365

n_d = 1.45600	ν_d = 90.90	$n_F - n_C$ = 0.005017
n_e = 1.45720	ν_e = 90.47	$n_{F'} - n_{C'}$ = 0.005053

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.44114
$n_{1970.1}$	1970.1	1.44388
$n_{1529.6}$	1529.6	1.44683
$n_{1060.0}$	1060.0	1.44991
n_t	1014.0	1.45026
n_s	852.1	1.45171
n_r	706.5	1.45358
n_C	656.3	1.45446
$n_{C'}$	643.8	1.45471
$n_{632.8}$	632.8	1.45494
n_D	589.3	1.45596
n_d	587.6	1.45600
n_e	546.1	1.45720
n_F	486.1	1.45948
$n_{F'}$	480.0	1.45976
n_g	435.8	1.46216
n_h	404.7	1.46436
n_i	365.0	1.46807
$n_{334.1}$	334.1	1.47199
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.738042712
B_2	0.363371967
B_3	0.989296264
C_1	0.003390656
C_2	0.0117551189
C_3	212.84214500

Constants of Formula for dn/dT

D_0	-2.05E-05
D_1	-6.33E-09
D_2	4.13E-11
E_0	3.84E-07
E_1	1.63E-10
λ_{TK} [µm]	0.073

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.997	0.993
2325	0.998	0.996
1970	0.999	0.998
1530	0.999	0.998
1060	0.998	0.995
700	0.997	0.993
660	0.997	0.993
620	0.997	0.994
580	0.998	0.994
546	0.998	0.995
500	0.998	0.994
460	0.997	0.992
436	0.996	0.991
420	0.996	0.991
405	0.996	0.991
400	0.996	0.991
390	0.996	0.990
380	0.995	0.987
370	0.992	0.980
365	0.990	0.975
350	0.976	0.940
334	0.930	0.830
320	0.820	0.610
310	0.690	0.400
300	0.530	0.200
290	0.360	0.080
280	0.240	0.030
270	0.150	0.010
260	0.110	0.010
250	0.090	0.000

Color Code

λ80 / λ5	33/--

Remarks

XLS glass

Relative Partial Dispersion P

$P_{s,t}$	0.2894
$P_{C,s}$	0.5481
$P_{d,C}$	0.3066
$P_{e,d}$	0.2388
$P_{g,F}$	0.5347
$P_{i,h}$	0.7387

Relative Partial Dispersion P'

$P'_{s,t}$	0.2873
$P'_{C',s}$	0.5927
$P'_{d,C'}$	0.2557
$P'_{e,d}$	0.2371
$P'_{g,F'}$	0.4749
$P'_{i,h}$	0.7334

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.1386
$\Delta P_{C,s}$	-0.0667
$\Delta P_{F,e}$	0.0140
$\Delta P_{g,F}$	0.0438
$\Delta P_{i,g}$	0.2157

Chemical Properties

CR	1
FR	1
SR	52.3
AR	3.3
PR	4.3
SR-J	4
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	13.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	15.7
T_g [°C]	445
$T_{10^{13}}$ [°C]	448
$T_{10^{7.6}}$ [°C]	508
c_p [J/(g*K)]	0.710
λ [W/(m•K)]	0.760
AT [°C]	475
ρ [g/cm^3]	3.65
E [10^3 N/mm^2]	70
µ	0.301
K [10^{-6} mm^2/N]	0.54
$HK_{0.1/20}$	372
HG	6

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-5.4	-5.1	-4.8	-7.3	-7.1	-6.8
+20/+40	-6.5	-6.2	-5.9	-7.7	-7.4	-7.2
+60/+80	-6.8	-6.5	-6.2	-7.8	-7.5	-7.3

Datasheet

SCHOTT
glass made of ideas

N-PK51
529770.386

n_d = 1.52855	ν_d = 76.98	$n_F - n_C$ = 0.006867
n_e = 1.53019	ν_e = 76.58	$n_{F'} - n_{C'}$ = 0.006923

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.50987
$n_{1970.1}$	1970.1	1.51312
$n_{1529.6}$	1529.6	1.51665
$n_{1060.0}$	1060.0	1.52045
n_t	1014.0	1.52089
n_s	852.1	1.52278
n_r	706.5	1.52527
n_C	656.3	1.52646
$n_{C'}$	643.8	1.52680
$n_{632.8}$	632.8	1.52711
n_D	589.3	1.52849
n_d	587.6	1.52855
n_e	546.1	1.53019
n_F	486.1	1.53333
$n_{F'}$	480.0	1.53372
n_g	435.8	1.53704
n_h	404.7	1.54010
n_i	365.0	1.54527
$n_{334.1}$	334.1	1.55079
$n_{312.6}$	312.6	1.55579
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.156107750
B_2	0.153229344
B_3	0.785618966
C_1	0.005855974
C_2	0.0194072416
C_3	140.53704600

Constants of Formula for dn/dT

D_0	-1.98E-05
D_1	-6.06E-09
D_2	1.60E-11
E_0	4.16E-07
E_1	5.01E-10
λ_{TK} [µm]	0.134

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.920	0.810
2325	0.940	0.860
1970	0.986	0.966
1530	0.994	0.985
1060	0.998	0.994
700	0.997	0.992
660	0.996	0.991
620	0.997	0.992
580	0.998	0.995
546	0.998	0.996
500	0.997	0.993
460	0.995	0.988
436	0.994	0.984
420	0.994	0.984
405	0.994	0.986
400	0.994	0.986
390	0.994	0.984
380	0.989	0.973
370	0.982	0.955
365	0.976	0.940
350	0.930	0.840
334	0.820	0.600
320	0.600	0.280
310	0.400	0.100
300	0.210	0.020
290	0.060	0.000
280	0.010	
270	0.000	
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2750
$P_{C,s}$	0.5360
$P_{d,C}$	0.3046
$P_{e,d}$	0.2387
$P_{g,F}$	0.5401
$P_{i,h}$	0.7535

Relative Partial Dispersion P'

$P'_{s,t}$	0.2727
$P'_{C',s}$	0.5797
$P'_{d,C'}$	0.2540
$P'_{e,d}$	0.2367
$P'_{g,F'}$	0.4794
$P'_{i,h}$	0.7473

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0991
$\Delta P_{C,s}$	-0.0463
$\Delta P_{F,e}$	0.0088
$\Delta P_{g,F}$	0.0258
$\Delta P_{i,g}$	0.1203

Chemical Properties

CR	1
FR	0
SR	52.3
AR	3.3
PR	4.3
SR-J	3
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	12.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	14.1
T_g [°C]	487
$T_{10^{13}}$ [°C]	488
$T_{10^{7.6}}$ [°C]	568
c_p [J/(g*K)]	0.620
λ [W/(m•K)]	0.650
AT [°C]	528
ρ [g/cm^3]	3.86
E [10^3 N/mm^2]	74
µ	0.295
K [10^{-6} mm^2/N]	0.54
$HK_{0.1/20}$	415
HG	6
Abrasion Aa	592

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-6.0	-5.7	-5.4	-8.1	-7.8	-7.5
+20/+40	-7.1	-6.7	-6.4	-8.4	-8.1	-7.7
+60/+80	-7.5	-7.1	-6.7	-8.6	-8.2	-7.8

Datasheet

SCHOTT
glass made of ideas

N-PK52A
497816.370

n_d = 1.49700	ν_d = 81.61	$n_F - n_C$ = 0.006090
n_e = 1.49845	ν_e = 81.21	$n_{F'} - n_{C'}$ = 0.006138

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.47966
$n_{1970.1}$	1970.1	1.48279
$n_{1529.6}$	1529.6	1.48616
$n_{1060.0}$	1060.0	1.48971
n_t	1014.0	1.49012
n_s	852.1	1.49184
n_r	706.5	1.49408
n_C	656.3	1.49514
$n_{C'}$	643.8	1.49544
$n_{632.8}$	632.8	1.49571
n_D	589.3	1.49695
n_d	587.6	1.49700
n_e	546.1	1.49845
n_F	486.1	1.50123
$n_{F'}$	480.0	1.50157
n_g	435.8	1.50450
n_h	404.7	1.50720
n_i	365.0	1.51175
$n_{334.1}$	334.1	1.51658
$n_{312.6}$	312.6	1.52096
$n_{296.7}$	296.7	1.52489
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.029607000
B_2	0.188050600
B_3	0.736488165
C_1	0.005168002
C_2	0.0166658798
C_3	138.96412900

Constants of Formula for dn/dT

D_0	-1.97E-05
D_1	-5.50E-09
D_2	5.28E-12
E_0	3.60E-07
E_1	2.45E-10
λ_{TK} [µm]	0.172

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.987	0.967
2325	0.991	0.978
1970	0.996	0.990
1530	0.998	0.994
1060	0.998	0.994
700	0.997	0.993
660	0.997	0.993
620	0.998	0.995
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.997	0.992
436	0.996	0.990
420	0.996	0.990
405	0.997	0.992
400	0.997	0.992
390	0.997	0.992
380	0.996	0.989
370	0.992	0.980
365	0.988	0.970
350	0.950	0.88
334	0.83	0.63
320	0.62	0.30
310	0.43	0.12
300	0.25	0.04
290	0.12	0.01
280	0.04	
270	0.01	
260		
250		

Color Code

λ80 / λ5	34/28

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2819
$P_{C,s}$	0.5417
$P_{d,C}$	0.3055
$P_{e,d}$	0.2388
$P_{g,F}$	0.5377
$P_{i,h}$	0.7470

Relative Partial Dispersion P'

$P'_{s,t}$	0.2797
$P'_{C',s}$	0.5858
$P'_{d,C'}$	0.2548
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4774
$P'_{i,h}$	0.7412

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.1084
$\Delta P_{C,s}$	-0.0514
$\Delta P_{F,e}$	0.0103
$\Delta P_{g,F}$	0.0311
$\Delta P_{i,g}$	0.1497

Chemical Properties

CR	1
FR	0
SR	52.3
AR	3.3
PR	4.3
SR-J	4
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	13.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	15.0
T_g [°C]	467
$T_{10^{13}}$ [°C]	467
$T_{10^{7.6}}$ [°C]	538
c_p [J/(g*K)]	0.670
λ [W/(m•K)]	0.730
AT [°C]	520
ρ [g/cm^3]	3.70
E [10^3 N/mm^2]	71
µ	0.298
K [10^{-6} mm^2/N]	0.65
$HK_{0.1/20}$	355
HG	6
Abrasion Aa	526

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-5.7	-5.4	-5.1	-7.7	-7.4	-7.1
+20/+40	-6.7	-6.4	-6.0	-8.0	-7.7	-7.4
+60/+80	-7.1	-6.8	-6.4	-8.1	-7.8	-7.5

Datasheet

SCHOTT
glass made of ideas

N-PSK3
552635.291

n_d = 1.55232 ν_d = 63.46 $n_F - n_C$ = 0.008704
n_e = 1.55440 ν_e = 63.23 $n_{F'} - n_{C'}$ = 0.008767

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.52375
$n_{1970.1}$	1970.1	1.52954
$n_{1529.6}$	1529.6	1.53558
$n_{1060.0}$	1060.0	1.54154
n_t	1014.0	1.54218
n_s	852.1	1.54482
n_r	706.5	1.54811
n_C	656.3	1.54965
$n_{C'}$	643.8	1.55008
$n_{632.8}$	632.8	1.55048
n_D	589.3	1.55224
n_d	587.6	1.55232
n_e	546.1	1.55440
n_F	486.1	1.55835
$n_{F'}$	480.0	1.55885
n_g	435.8	1.56302
n_h	404.7	1.56688
n_i	365.0	1.57342
$n_{334.1}$	334.1	1.58041
$n_{312.6}$	312.6	1.58679
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.887272110
B_2	0.489592425
B_3	1.048652960
C_1	0.004698241
C_2	0.0161818463
C_3	104.37497500

Constants of Formula for dn/dT

D_0	2.03E-06
D_1	1.19E-08
D_2	2.46E-11
E_0	3.14E-07
E_1	2.45E-10
λ_{TK} [µm]	0.235

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.650	0.340
2325	0.810	0.590
1970	0.950	0.880
1530	0.991	0.978
1060	0.999	0.997
700	0.998	0.995
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.993
500	0.996	0.990
460	0.995	0.987
436	0.994	0.986
420	0.994	0.986
405	0.995	0.987
400	0.994	0.986
390	0.993	0.983
380	0.991	0.977
370	0.988	0.971
365	0.985	0.964
350	0.967	0.920
334	0.910	0.800
320	0.770	0.520
310	0.580	0.260
300	0.320	0.060
290	0.120	
280	0.030	
270		
260		
250		

Color Code

λ80 / λ5	33/28

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.3023
$P_{C,s}$	0.5555
$P_{d,C}$	0.3069
$P_{e,d}$	0.2386
$P_{g,F}$	0.5365
$P_{i,h}$	0.7509

Relative Partial Dispersion P'

$P'_{s,t}$	0.3001
$P'_{C',s}$	0.6002
$P'_{d,C'}$	0.2559
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4767
$P'_{i,h}$	0.7454

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0118
$\Delta P_{C,s}$	0.0047
$\Delta P_{F,e}$	-0.0005
$\Delta P_{g,F}$	-0.0005
$\Delta P_{i,g}$	0.0016

Chemical Properties

CR	3
FR	0
SR	2.2
AR	2
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.3
T_g [°C]	599
$T_{10^{13}}$ [°C]	597
$T_{10^{7.6}}$ [°C]	736
c_p [J/(g*K)]	0.682
λ [W/(m•K)]	0.990
ρ [g/cm³]	2.91
E [10^3 N/mm²]	84
µ	0.226
K [10^{-6} mm²/N]	2.48
$HK_{0.1/20}$	630
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.6	3.1	3.6	0.6	1.0	1.5
+20/+40	2.5	3.0	3.5	1.2	1.6	2.1
+60/+80	2.7	3.2	3.8	1.7	2.2	2.7

Datasheet

SCHOTT
glass made of ideas

N-PSK53A
618634.357

n_d = 1.61800	ν_d = 63.39	$n_F - n_C$ = 0.009749
n_e = 1.62033	ν_e = 63.10	$n_{F'} - n_{C'}$ = 0.009831

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.59015
$n_{1970.1}$	1970.1	1.59528
$n_{1529.6}$	1529.6	1.60073
$n_{1060.0}$	1060.0	1.60641
n_t	1014.0	1.60706
n_s	852.1	1.60979
n_r	706.5	1.61334
n_C	656.3	1.61503
$n_{C'}$	643.8	1.61550
$n_{632.8}$	632.8	1.61595
n_D	589.3	1.61791
n_d	587.6	1.61800
n_e	546.1	1.62033
n_F	486.1	1.62478
$n_{F'}$	480.0	1.62534
n_g	435.8	1.63007
n_h	404.7	1.63445
n_i	365.0	1.64190
$n_{334.1}$	334.1	1.64991
$n_{312.6}$	312.6	1.65724
$n_{296.7}$	296.7	1.66390
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.381218360
B_2	0.196745645
B_3	0.886089205
C_1	0.007064163
C_2	0.0233251345
C_3	97.48473450

Constants of Formula for dn/dT

D_0	-9.28E-06
D_1	7.19E-09
D_2	1.45E-12
E_0	4.06E-07
E_1	3.17E-10
λ_{TK} [µm]	0.190

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.610	0.290
2325	0.760	0.510
1970	0.920	0.800
1530	0.982	0.956
1060	0.998	0.994
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.998	0.994
546	0.998	0.995
500	0.997	0.992
460	0.994	0.986
436	0.993	0.982
420	0.992	0.979
405	0.988	0.970
400	0.985	0.964
390	0.976	0.940
380	0.959	0.900
370	0.930	0.830
365	0.910	0.780
350	0.780	0.530
334	0.530	0.200
320	0.230	0.030
310	0.060	0.000
300	0.000	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/31

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2797
$P_{C,s}$	0.5380
$P_{d,C}$	0.3044
$P_{e,d}$	0.2385
$P_{g,F}$	0.5424
$P_{i,h}$	0.7642

Relative Partial Dispersion P'

$P'_{s,t}$	0.2774
$P'_{C',s}$	0.5816
$P'_{d,C'}$	0.2538
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4815
$P'_{i,h}$	0.7578

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0279
$\Delta P_{C,s}$	-0.0127
$\Delta P_{F,e}$	0.0020
$\Delta P_{g,F}$	0.0052
$\Delta P_{i,g}$	0.0208

Chemical Properties

CR	1
FR	1
SR	53.3
AR	2.3
PR	4.3
SR-J	5
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.8
T_g [°C]	606
$T_{10^{13}}$ [°C]	609
$T_{10^{7.6}}$ [°C]	699
c_p [J/(g*K)]	0.590
λ [W/(m•K)]	0.640
AT [°C]	647
ρ [g/cm^3]	3.57
E [10^3 N/mm^2]	76
µ	0.288
K [10^{-6} mm^2/N]	1.16
$HK_{0.1/20}$	415
HG	6
Abrasion Aa	284

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-2.6	-2.1	-1.6	-4.7	-4.3	-3.8
+20/+40	-2.9	-2.4	-1.8	-4.3	-3.8	-3.3
+60/+80	-2.9	-2.3	-1.8	-4.0	-3.5	-2.9

Datasheet

SCHOTT N-BK7®
517642.251

n_d = 1.51680	ν_d = 64.17	$n_F - n_C$ = 0.008054
n_e = 1.51872	ν_e = 63.96	$n_{F'} - n_{C'}$ = 0.008110

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48921
$n_{1970.1}$	1970.1	1.49495
$n_{1529.6}$	1529.6	1.50091
$n_{1060.0}$	1060.0	1.50669
n_t	1014.0	1.50731
n_s	852.1	1.50980
n_r	706.5	1.51289
n_C	656.3	1.51432
$n_{C'}$	643.8	1.51472
$n_{632.8}$	632.8	1.51509
n_D	589.3	1.51673
n_d	587.6	1.51680
n_e	546.1	1.51872
n_F	486.1	1.52238
$n_{F'}$	480.0	1.52283
n_g	435.8	1.52668
n_h	404.7	1.53024
n_i	365.0	1.53627
$n_{334.1}$	334.1	1.54272
$n_{312.6}$	312.6	1.54862
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.039612120
B_2	0.231792344
B_3	1.010469450
C_1	0.006000699
C_2	0.0200179144
C_3	103.56065300

Constants of Formula for dn/dT

D_0	1.86E-06
D_1	1.31E-08
D_2	-1.37E-11
E_0	4.34E-07
E_1	6.27E-10
λ_{TK} [µm]	0.170

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.67	0.36
2325	0.79	0.56
1970	0.93	0.84
1530	0.992	0.980
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.996
500	0.998	0.994
460	0.997	0.993
436	0.997	0.992
420	0.997	0.993
405	0.997	0.993
400	0.997	0.992
390	0.996	0.989
380	0.993	0.983
370	0.991	0.977
365	0.988	0.971
350	0.967	0.92
334	0.91	0.78
320	0.77	0.52
310	0.57	0.25
300	0.29	0.05
290	0.06	
280		
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3098
$P_{C,s}$	0.5612
$P_{d,C}$	0.3076
$P_{e,d}$	0.2386
$P_{g,F}$	0.5349
$P_{i,h}$	0.7483

Relative Partial Dispersion P'

$P'_{s,t}$	0.3076
$P'_{C',s}$	0.6062
$P'_{d,C'}$	0.2566
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4754
$P'_{i,h}$	0.7432

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0216
$\Delta P_{C,s}$	0.0087
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	0.0035

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	557
$T_{10^{13}}$ [°C]	557
$T_{10^{7.6}}$ [°C]	719
c_p [J/(g*K)]	0.858
λ [W/(m•K)]	1.114
AT [°C]	609
ρ [g/cm^3]	2.51
E [10^3 N/mm^2]	82
µ	0.206
K [10^{-6} mm^2/N]	2.76
$HK_{0.1/20}$	610
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.4	2.9	3.3	0.3	0.8	1.2
+20/+40	2.4	3.0	3.5	1.1	1.6	2.1
+60/+80	2.5	3.1	3.7	1.5	2.1	2.7

Datasheet

SCHOTT
glass made of ideas

N-BK7HT
517642.251

n_d = 1.51680	ν_d = 64.17	$n_F - n_C$ = 0.008054
n_e = 1.51872	ν_e = 63.96	$n_{F'} - n_{C'}$ = 0.008110

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48921
$n_{1970.1}$	1970.1	1.49495
$n_{1529.6}$	1529.6	1.50091
$n_{1060.0}$	1060.0	1.50669
n_t	1014.0	1.50731
n_s	852.1	1.50980
n_r	706.5	1.51289
n_C	656.3	1.51432
$n_{C'}$	643.8	1.51472
$n_{632.8}$	632.8	1.51509
n_D	589.3	1.51673
n_d	587.6	1.51680
n_e	546.1	1.51872
n_F	486.1	1.52238
$n_{F'}$	480.0	1.52283
n_g	435.8	1.52668
n_h	404.7	1.53024
n_i	365.0	1.53627
$n_{334.1}$	334.1	1.54272
$n_{312.6}$	312.6	1.54862
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.039612120
B_2	0.231792344
B_3	1.010469450
C_1	0.006000699
C_2	0.0200179144
C_3	103.56065300

Constants of Formula for dn/dT

D_0	1.86E-06
D_1	1.31E-08
D_2	-1.37E-11
E_0	4.34E-07
E_1	6.27E-10
λ_{TK} [µm]	0.170

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.750	0.490
2325	0.850	0.660
1970	0.954	0.890
1530	0.995	0.987
1060	0.999	0.999
700	0.999	0.998
660	0.999	0.997
620	0.999	0.997
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.996
436	0.998	0.996
420	0.998	0.996
405	0.998	0.996
400	0.998	0.996
390	0.998	0.994
380	0.997	0.992
370	0.996	0.989
365	0.994	0.985
350	0.985	0.964
334	0.950	0.880
320	0.820	0.600
310	0.570	0.240
300	0.220	0.020
290	0.040	
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3098
$P_{C,s}$	0.5612
$P_{d,C}$	0.3076
$P_{e,d}$	0.2386
$P_{g,F}$	0.5349
$P_{i,h}$	0.7483

Relative Partial Dispersion P'

$P'_{s,t}$	0.3076
$P'_{C',s}$	0.6062
$P'_{d,C'}$	0.2566
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4754
$P'_{i,h}$	0.7432

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0216
$\Delta P_{C,s}$	0.0087
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	0.0035

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	557
$T_{10^{13}}$ [°C]	557
$T_{10^{7.6}}$ [°C]	719
c_p [J/(g*K)]	0.858
λ [W/(m•K)]	1.114
ρ [g/cm³]	2.51
E [10^3 N/mm²]	82
µ	0.206
K [10^{-6} mm²/N]	2.77
$HK_{0.1/20}$	610
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.4	2.9	3.3	0.3	0.8	1.2
+20/+40	2.4	3.0	3.5	1.1	1.6	2.1
+60/+80	2.5	3.1	3.7	1.5	2.1	2.7

Datasheet

N-BK7HTi
517642.251

n_d = 1.51680	ν_d = 64.17	$n_F - n_C$ = 0.008054
n_e = 1.51872	ν_e = 63.96	$n_{F'} - n_{C'}$ = 0.008110

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48921
$n_{1970.1}$	1970.1	1.49495
$n_{1529.6}$	1529.6	1.50091
$n_{1060.0}$	1060.0	1.50669
n_t	1014.0	1.50731
n_s	852.1	1.50980
n_r	706.5	1.51289
n_C	656.3	1.51432
$n_{C'}$	643.8	1.51472
$n_{632.8}$	632.8	1.51509
n_D	589.3	1.51673
n_d	587.6	1.51680
n_e	546.1	1.51872
n_F	486.1	1.52238
$n_{F'}$	480.0	1.52283
n_g	435.8	1.52668
n_h	404.7	1.53024
n_i	365.0	1.53627
$n_{334.1}$	334.1	1.54272
$n_{312.6}$	312.6	1.54862
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.039612120
B_2	0.231792344
B_3	1.010469450
C_1	0.006000699
C_2	0.0200179144
C_3	103.56065300

Constants of Formula for dn/dT

D_0	1.86E-06
D_1	1.31E-08
D_2	-1.37E-11
E_0	4.34E-07
E_1	6.27E-10
λ_{TK} [µm]	0.170

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.75	0.49
2325	0.85	0.66
1970	0.954	0.89
1530	0.995	0.987
1060	0.999	0.999
700	0.999	0.998
660	0.999	0.997
620	0.999	0.997
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.996
436	0.998	0.996
420	0.998	0.996
405	0.998	0.996
400	0.998	0.996
390	0.998	0.994
380	0.997	0.992
370	0.996	0.989
365	0.994	0.985
350	0.985	0.964
334	0.95	0.88
320	0.82	0.60
310	0.57	0.24
300	0.22	0.02
290	0.04	
280	0.00	
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

i-line glass

Relative Partial Dispersion P

$P_{s,t}$	0.3098
$P_{C,s}$	0.5612
$P_{d,C}$	0.3076
$P_{e,d}$	0.2386
$P_{g,F}$	0.5349
$P_{i,h}$	0.7483

Relative Partial Dispersion P'

$P'_{s,t}$	0.3076
$P'_{C',s}$	0.6062
$P'_{d,C'}$	0.2566
$P'_{e,d}$	0.2370
$P'_{g,F'}$	0.4754
$P'_{i,h}$	0.7432

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0216
$\Delta P_{C,s}$	0.0087
$\Delta P_{F,e}$	-0.0009
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	0.0035

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	557
$T_{10^{13}}$ [°C]	557
$T_{10^{7.6}}$ [°C]	719
c_p [J/(g*K)]	0.858
λ [W/(m•K)]	1.114
ρ [g/cm³]	2.51
E [10^3 N/mm²]	82
µ	0.206
K [10^{-6} mm²/N]	2.76
$HK_{0.1/20}$	610
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.4	2.9	3.3	0.3	0.8	1.2
+20/+40	2.4	3.0	3.5	1.1	1.6	2.1
+60/+80	2.5	3.1	3.7	1.5	2.1	2.7

Datasheet

SCHOTT
glass made of ideas

N-BK10
498670.239

n_d = 1.49782	ν_d = 66.95	$n_F - n_C$ = 0.007435
n_e = 1.49960	ν_e = 66.78	$n_{F'} - n_{C'}$ = 0.007481

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.47060
$n_{1970.1}$	1970.1	1.47647
$n_{1529.6}$	1529.6	1.48252
$n_{1060.0}$	1060.0	1.48827
n_t	1014.0	1.48887
n_s	852.1	1.49127
n_r	706.5	1.49419
n_C	656.3	1.49552
$n_{C'}$	643.8	1.49589
$n_{632.8}$	632.8	1.49623
n_D	589.3	1.49775
n_d	587.6	1.49782
n_e	546.1	1.49960
n_F	486.1	1.50296
$n_{F'}$	480.0	1.50337
n_g	435.8	1.50690
n_h	404.7	1.51014
n_i	365.0	1.51561
$n_{334.1}$	334.1	1.52144
$n_{312.6}$	312.6	1.52674
$n_{296.7}$	296.7	1.53151
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.888308131
B_2	0.328964475
B_3	0.984610769
C_1	0.005169008
C_2	0.0161190045
C_3	99.75753310

Constants of Formula for dn/dT

D_0	3.32E-06
D_1	1.72E-08
D_2	-2.05E-11
E_0	3.57E-07
E_1	3.90E-10
λ_{TK} [µm]	0.169

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.740	0.470
2325	0.870	0.710
1970	0.980	0.950
1530	0.992	0.980
1060	0.998	0.996
700	0.998	0.995
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.993
500	0.996	0.991
460	0.996	0.990
436	0.996	0.989
420	0.996	0.989
405	0.996	0.990
400	0.996	0.990
390	0.996	0.989
380	0.994	0.985
370	0.994	0.986
365	0.994	0.986
350	0.991	0.978
334	0.978	0.950
320	0.940	0.860
310	0.870	0.710
300	0.710	0.420
290	0.410	0.110
280	0.120	
270	0.010	
260		
250		

Color Code

λ80 / λ5	31/27

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.3224
$P_{C,s}$	0.5716
$P_{d,C}$	0.3093
$P_{e,d}$	0.2387
$P_{g,F}$	0.5303
$P_{i,h}$	0.7360

Relative Partial Dispersion P'

$P'_{s,t}$	0.3204
$P'_{C',s}$	0.6174
$P'_{d,C'}$	0.2580
$P'_{e,d}$	0.2373
$P'_{g,F'}$	0.4716
$P'_{i,h}$	0.7315

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0314
$\Delta P_{C,s}$	0.0126
$\Delta P_{F,e}$	-0.0012
$\Delta P_{g,F}$	-0.0008
$\Delta P_{i,g}$	0.0091

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.6
T_g [°C]	551
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	753
c_p [J/(g*K)]	0.810
λ [W/(m•K)]	1.320
ρ [g/cm³]	2.39
E [10^3 N/mm²]	71
µ	0.203
K [10^{-6} mm²/N]	3.21
$HK_{0.1/20}$	560
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.7	3.1	3.5	0.7	1.1	1.4
+20/+40	2.9	3.4	3.8	1.6	2.1	2.5
+60/+80	3.1	3.7	4.1	2.1	2.6	3.1

Datasheet

SCHOTT
glass made of ideas

P-BK7
516641.243

n_d = 1.51640	ν_d = 64.06	$n_F - n_C$ = 0.008061
n_e = 1.51832	ν_e = 63.87	$n_{F'} - n_{C'}$ = 0.008115

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48811
$n_{1970.1}$	1970.1	1.49407
$n_{1529.6}$	1529.6	1.50025
$n_{1060.0}$	1060.0	1.50620
n_t	1014.0	1.50683
n_s	852.1	1.50936
n_r	706.5	1.51248
n_C	656.3	1.51392
$n_{C'}$	643.8	1.51431
$n_{632.8}$	632.8	1.51469
n_D	589.3	1.51633
n_d	587.6	1.51640
n_e	546.1	1.51832
n_F	486.1	1.52198
$n_{F'}$	480.0	1.52243
n_g	435.8	1.52628
n_h	404.7	1.52982
n_i	365.0	1.53583
$n_{334.1}$	334.1	1.54227
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.183185030
B_2	0.087175643
B_3	1.031337010
C_1	0.007221420
C_2	0.0268216805
C_3	101.70236200

Constants of Formula for dn/dT

D_0	5.96E-06
D_1	1.36E-08
D_2	1.04E-12
E_0	5.00E-07
E_1	6.97E-10
λ_{TK} [µm]	0.125

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.460
2325	0.870	0.700
1970	0.967	0.920
1530	0.992	0.979
1060	0.999	0.999
700	0.999	0.997
660	0.999	0.997
620	0.999	0.997
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.998	0.995
436	0.998	0.994
420	0.997	0.994
405	0.997	0.993
400	0.997	0.992
390	0.996	0.990
380	0.994	0.986
370	0.992	0.979
365	0.989	0.973
350	0.971	0.930
334	0.880	0.730
320	0.570	0.240
310	0.180	0.020
300	0.000	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/30

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.3143
$P_{C,s}$	0.5649
$P_{d,C}$	0.3082
$P_{e,d}$	0.2387
$P_{g,F}$	0.5335
$P_{i,h}$	0.7455

Relative Partial Dispersion P'

$P'_{s,t}$	0.3122
$P'_{C',s}$	0.6102
$P'_{d,C'}$	0.2571
$P'_{e,d}$	0.2371
$P'_{g,F'}$	0.4742
$P'_{i,h}$	0.7405

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0303
$\Delta P_{C,s}$	0.0126
$\Delta P_{F,e}$	-0.0016
$\Delta P_{g,F}$	-0.0025
$\Delta P_{i,g}$	-0.0017

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2.3
SR-J	1
WR-J	4

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.3
T_g [°C]	498
$T_{10^{13}}$ [°C]	498
$T_{10^{7.6}}$ [°C]	657
c_p [J/(g*K)]	0.870
λ [W/(m•K)]	1.130
AT [°C]	546
ρ [g/cm³]	2.43
E [10^3 N/mm²]	85
µ	0.202
K [10^{-6} mm²/N]	2.77
$HK_{0.1/20}$	627
Abrasion Aa	66

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.1	4.7	5.2	2.1	2.6	3.1
+20/+40	4.1	4.8	5.3	2.8	3.5	4.0
+60/+80	4.3	5.1	5.7	3.3	4.0	4.6

Datasheet

K7
511604.253

n_d = 1.51112 ν_d = 60.41 $n_F - n_C$ = 0.008461
n_e = 1.51314 ν_e = 60.15 $n_{F'} - n_{C'}$ = 0.008531

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48553
$n_{1970.1}$	1970.1	1.49046
$n_{1529.6}$	1529.6	1.49565
$n_{1060.0}$	1060.0	1.50091
n_t	1014.0	1.50150
n_s	852.1	1.50394
n_r	706.5	1.50707
n_C	656.3	1.50854
$n_{C'}$	643.8	1.50895
$n_{632.8}$	632.8	1.50934
n_D	589.3	1.51105
n_d	587.6	1.51112
n_e	546.1	1.51314
n_F	486.1	1.51700
$n_{F'}$	480.0	1.51748
n_g	435.8	1.52159
n_h	404.7	1.52540
n_i	365.0	1.53189
$n_{334.1}$	334.1	1.53891
$n_{312.6}$	312.6	1.54537
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.127355500
B_2	0.124412303
B_3	0.827100531
C_1	0.007203417
C_2	0.0269835916
C_3	100.38458800

Constants of Formula for dn/dT

D_0	-1.67E-06
D_1	8.80E-09
D_2	-2.86E-11
E_0	5.42E-07
E_1	7.81E-10
λ_{TK} [µm]	0.172

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.650	0.340
2325	0.760	0.500
1970	0.910	0.790
1530	0.992	0.980
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.994
546	0.998	0.994
500	0.997	0.993
460	0.996	0.990
436	0.996	0.990
420	0.996	0.990
405	0.996	0.990
400	0.996	0.990
390	0.995	0.988
380	0.993	0.983
370	0.990	0.976
365	0.988	0.971
350	0.976	0.940
334	0.910	0.780
320	0.710	0.420
310	0.400	0.100
300	0.090	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/30

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2880
$P_{C,s}$	0.5436
$P_{d,C}$	0.3049
$P_{e,d}$	0.2385
$P_{g,F}$	0.5422
$P_{i,h}$	0.7677

Relative Partial Dispersion P'

$P'_{s,t}$	0.2857
$P'_{C',s}$	0.5874
$P'_{d,C'}$	0.2542
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4814
$P'_{i,h}$	0.7614

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0001
$\Delta P_{C,s}$	-0.0001
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	0.0000
$\Delta P_{i,g}$	-0.0001

Chemical Properties

CR	3
FR	0
SR	2
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.7
T_g [°C]	513
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	712
c_p [J/(g*K)]	
λ [W/(m•K)]	
ρ [g/cm³]	2.53
E [10^3 N/mm²]	69
µ	0.214
K [10^{-6} mm²/N]	2.95
$HK_{0.1/20}$	520
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.0	1.6	2.1	-1.0	-0.4	0.1
+20/+40	0.9	1.6	2.2	-0.4	0.2	0.9
+60/+80	0.8	1.6	2.3	-0.2	0.6	1.2

Datasheet

K10
501564.252

n_d = 1.50137 ν_d = 56.41 $n_F - n_C$ = 0.008888
n_e = 1.50349 ν_e = 56.15 $n_{F'} - n_{C'}$ = 0.008967

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.47507
$n_{1970.1}$	1970.1	1.48008
$n_{1529.6}$	1529.6	1.48536
$n_{1060.0}$	1060.0	1.49076
n_t	1014.0	1.49137
n_s	852.1	1.49389
n_r	706.5	1.49713
n_C	656.3	1.49867
$n_{C'}$	643.8	1.49910
$n_{632.8}$	632.8	1.49950
n_D	589.3	1.50129
n_d	587.6	1.50137
n_e	546.1	1.50349
n_F	486.1	1.50756
$n_{F'}$	480.0	1.50807
n_g	435.8	1.51243
n_h	404.7	1.51649
n_i	365.0	1.52350
$n_{334.1}$	334.1	1.53120
$n_{312.6}$	312.6	1.53844
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.156870820
B_2	0.064262544
B_3	0.872376139
C_1	0.008094243
C_2	0.0386051284
C_3	104.74773000

Constants of Formula for dn/dT

D_0	4.86E-06
D_1	1.72E-08
D_2	-3.02E-11
E_0	3.82E-07
E_1	4.53E-10
λ_{TK} [µm]	0.260

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.770	0.520
2325	0.830	0.630
1970	0.940	0.850
1530	0.993	0.983
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.994
620	0.997	0.993
580	0.997	0.993
546	0.997	0.992
500	0.996	0.991
460	0.996	0.990
436	0.995	0.988
420	0.995	0.988
405	0.995	0.987
400	0.994	0.986
390	0.993	0.982
380	0.989	0.973
370	0.986	0.966
365	0.983	0.958
350	0.963	0.910
334	0.880	0.720
320	0.630	0.310
310	0.370	0.130
300	0.140	0.020
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/30

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2835
$P_{C,s}$	0.5385
$P_{d,C}$	0.3037
$P_{e,d}$	0.2382
$P_{g,F}$	0.5475
$P_{i,h}$	0.7888

Relative Partial Dispersion P'

$P'_{s,t}$	0.2810
$P'_{C',s}$	0.5817
$P'_{d,C'}$	0.2531
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4860
$P'_{i,h}$	0.7819

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0094
$\Delta P_{C,s}$	0.0041
$\Delta P_{F,e}$	-0.0007
$\Delta P_{g,F}$	-0.0015
$\Delta P_{i,g}$	-0.0048

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	459
$T_{10^{13}}$ [°C]	453
$T_{10^{7.6}}$ [°C]	691
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.120
ρ [g/cm³]	2.52
E [10^3 N/mm²]	65
µ	0.190
K [10^{-6} mm²/N]	3.12
$HK_{0.1/20}$	470
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.3	3.9	4.5	1.3	1.8	2.4
+20/+40	3.6	4.2	4.9	2.3	2.9	3.6
+60/+80	3.8	4.5	5.2	2.8	3.4	4.2

Datasheet

SCHOTT
glass made of ideas

N-K5
522595.259

n_d = 1.52249	ν_d = 59.48	$n_F - n_C$ = 0.008784
n_e = 1.52458	ν_e = 59.22	$n_{F'} - n_{C'}$ = 0.008858

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.49656
$n_{1970.1}$	1970.1	1.50146
$n_{1529.6}$	1529.6	1.50664
$n_{1060.0}$	1060.0	1.51197
n_t	1014.0	1.51257
n_s	852.1	1.51507
n_r	706.5	1.51829
n_C	656.3	1.51982
$n_{C'}$	643.8	1.52024
$n_{632.8}$	632.8	1.52064
n_D	589.3	1.52241
n_d	587.6	1.52249
n_e	546.1	1.52458
n_F	486.1	1.52860
$n_{F'}$	480.0	1.52910
n_g	435.8	1.53338
n_h	404.7	1.53734
n_i	365.0	1.54412
$n_{334.1}$	334.1	1.55145
$n_{312.6}$	312.6	1.55821
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.085118330
B_2	0.199562005
B_3	0.930511663
C_1	0.006610995
C_2	0.0241108660
C_3	111.98277700

Constants of Formula for dn/dT

D_0	-4.13E-07
D_1	1.03E-08
D_2	-3.40E-11
E_0	4.73E-07
E_1	5.19E-10
λ_{TK} [µm]	0.213

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.530
2325	0.850	0.660
1970	0.950	0.870
1530	0.994	0.986
1060	0.998	0.995
700	0.998	0.994
660	0.997	0.992
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.996	0.991
436	0.996	0.991
420	0.996	0.991
405	0.996	0.989
400	0.995	0.988
390	0.994	0.984
380	0.991	0.977
370	0.985	0.962
365	0.982	0.956
350	0.950	0.880
334	0.830	0.630
320	0.540	0.210
310	0.220	0.020
300	0.060	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	34/30

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2843
$P_{C,s}$	0.5404
$P_{d,C}$	0.3044
$P_{e,d}$	0.2384
$P_{g,F}$	0.5438
$P_{i,h}$	0.7717

Relative Partial Dispersion P'

$P'_{s,t}$	0.2819
$P'_{C',s}$	0.5839
$P'_{d,C'}$	0.2538
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4828
$P'_{i,h}$	0.7653

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0025
$\Delta P_{C,s}$	-0.0012
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0000
$\Delta P_{i,g}$	-0.0019

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.6
T_g [°C]	546
$T_{10^{13}}$ [°C]	540
$T_{10^{7.6}}$ [°C]	720
c_p [J/(g*K)]	0.783
λ [W/(m•K)]	0.950
ρ [g/cm³]	2.59
E [10^3 N/mm²]	71
µ	0.224
K [10^{-6} mm²/N]	3.03
$HK_{0.1/20}$	530
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.5	2.1	2.6	-0.6	0.0	0.5
+20/+40	1.4	2.1	2.7	0.1	0.7	1.4
+60/+80	1.4	2.1	2.8	0.4	1.1	1.8

Datasheet

SCHOTT
glass made of ideas

N-ZK7
508612.249

n_d = 1.50847	ν_d = 61.19	$n_F - n_C$ = 0.008310
n_e = 1.51045	ν_e = 60.98	$n_{F'} - n_{C'}$ = 0.008370

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48062
$n_{1970.1}$	1970.1	1.48637
$n_{1529.6}$	1529.6	1.49233
$n_{1060.0}$	1060.0	1.49813
n_t	1014.0	1.49876
n_s	852.1	1.50129
n_r	706.5	1.50445
n_C	656.3	1.50592
$n_{C'}$	643.8	1.50633
$n_{632.8}$	632.8	1.50671
n_D	589.3	1.50840
n_d	587.6	1.50847
n_e	546.1	1.51045
n_F	486.1	1.51423
$n_{F'}$	480.0	1.51470
n_g	435.8	1.51869
n_h	404.7	1.52238
n_i	365.0	1.52865
$n_{334.1}$	334.1	1.53538
$n_{312.6}$	312.6	1.54155
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.077150320
B_2	0.168079109
B_3	0.851889892
C_1	0.006766017
C_2	0.0230642817
C_3	89.04987780

Constants of Formula for dn/dT

D_0	1.15E-05
D_1	1.73E-08
D_2	-8.06E-11
E_0	4.32E-07
E_1	7.05E-10
λ_{TK} [µm]	0.179

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.660	0.350
2325	0.850	0.660
1970	0.971	0.930
1530	0.990	0.976
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.994	0.984
420	0.992	0.981
405	0.991	0.977
400	0.990	0.975
390	0.987	0.969
380	0.982	0.956
370	0.976	0.940
365	0.971	0.930
350	0.940	0.860
334	0.850	0.670
320	0.690	0.390
310	0.490	0.170
300	0.220	0.030
290	0.030	
280		
270		
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.3049
$P_{C,s}$	0.5570
$P_{d,C}$	0.3069
$P_{e,d}$	0.2386
$P_{g,F}$	0.5370
$P_{i,h}$	0.7543

Relative Partial Dispersion P'

$P'_{s,t}$	0.3027
$P'_{C',s}$	0.6017
$P'_{d,C'}$	0.2560
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4771
$P'_{i,h}$	0.7488

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0267
$\Delta P_{C,s}$	0.0115
$\Delta P_{F,e}$	-0.0017
$\Delta P_{g,F}$	-0.0039
$\Delta P_{i,g}$	-0.0129

Chemical Properties

CR	1
FR	0
SR	2
AR	1.2
PR	2.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	4.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	5.2
T_g [°C]	539
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	721
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.042
ρ [g/cm^3]	2.49
E [10^3 N/mm^2]	70
µ	0.214
K [10^{-6} mm^2/N]	3.63
$HK_{0.1/20}$	530
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	5.9	6.5	7.0	3.9	4.5	4.9
+20/+40	6.4	7.0	7.6	5.1	5.7	6.3
+60/+80	6.4	7.2	7.8	5.4	6.2	6.8

Datasheet

SCHOTT
glass made of ideas

N-ZK7A
508610.247

n_d = 1.50805	ν_d = 61.04	$n_F - n_C$ = 0.008323
n_e = 1.51004	ν_e = 60.84	$n_{F'} - n_{C'}$ = 0.008384

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.48001
$n_{1970.1}$	1970.1	1.48582
$n_{1529.6}$	1529.6	1.49184
$n_{1060.0}$	1060.0	1.49768
n_t	1014.0	1.49831
n_s	852.1	1.50086
n_r	706.5	1.50403
n_C	656.3	1.50550
$n_{C'}$	643.8	1.50591
$n_{632.8}$	632.8	1.50629
n_D	589.3	1.50798
n_d	587.6	1.50805
n_e	546.1	1.51004
n_F	486.1	1.51382
$n_{F'}$	480.0	1.51429
n_g	435.8	1.51829
n_h	404.7	1.52198
n_i	365.0	1.52826
$n_{334.1}$	334.1	1.53500
$n_{312.6}$	312.6	1.54118
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.075098910
B_2	0.168895044
B_3	0.860503983
C_1	0.006766017
C_2	0.0230642817
C_3	89.04987780

Constants of Formula for dn/dT

D_0	1.09E-05
D_1	1.98E-08
D_2	-1.49E-11
E_0	4.48E-07
E_1	3.26E-10
λ_{TK} [µm]	0.183

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.660	0.350
2325	0.850	0.660
1970	0.971	0.930
1530	0.990	0.976
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.994	0.984
420	0.992	0.981
405	0.991	0.977
400	0.990	0.975
390	0.987	0.969
380	0.982	0.956
370	0.976	0.940
365	0.971	0.930
350	0.940	0.860
334	0.850	0.670
320	0.690	0.390
310	0.490	0.170
300	0.220	0.030
290	0.030	
280		
270		
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.3058
$P_{C,s}$	0.5576
$P_{d,C}$	0.3070
$P_{e,d}$	0.2386
$P_{g,F}$	0.5368
$P_{i,h}$	0.7540

Relative Partial Dispersion P'

$P'_{s,t}$	0.3036
$P'_{C',s}$	0.6024
$P'_{d,C'}$	0.2560
$P'_{e,d}$	0.2369
$P'_{g,F'}$	0.4770
$P'_{i,h}$	0.7486

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0289
$\Delta P_{C,s}$	0.0125
$\Delta P_{F,e}$	-0.0019
$\Delta P_{g,F}$	-0.0043
$\Delta P_{i,g}$	-0.0146

Chemical Properties

CR	1
FR	0
SR	2
AR	1.2
PR	2.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	4.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	5.2
T_g [°C]	519
$T_{10^{13}}$ [°C]	547
$T_{10^{7.6}}$ [°C]	729
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.042
ρ [g/cm³]	2.47
E [10^3 N/mm²]	70
µ	0.214
K [10^{-6} mm²/N]	3.63
$HK_{0.1/20}$	530

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	5.8	6.5	7.0	3.8	4.4	4.9
+20/+40	6.1	6.8	7.4	4.9	5.5	6.1
+60/+80	6.5	7.2	7.9	5.5	6.2	6.8

Datasheet

SCHOTT
glass made of ideas

N-BAK1
573576.319

n_d = 1.57250	ν_d = 57.55	$n_F - n_C$ = 0.009948
n_e = 1.57487	ν_e = 57.27	$n_{F'} - n_{C'}$ = 0.010039

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54556
$n_{1970.1}$	1970.1	1.55032
$n_{1529.6}$	1529.6	1.55543
$n_{1060.0}$	1060.0	1.56088
n_t	1014.0	1.56152
n_s	852.1	1.56421
n_r	706.5	1.56778
n_C	656.3	1.56949
$n_{C'}$	643.8	1.56997
$n_{632.8}$	632.8	1.57041
n_D	589.3	1.57241
n_d	587.6	1.57250
n_e	546.1	1.57487
n_F	486.1	1.57943
$n_{F'}$	480.0	1.58000
n_g	435.8	1.58488
n_h	404.7	1.58941
n_i	365.0	1.59716
$n_{334.1}$	334.1	1.60554
$n_{312.6}$	312.6	1.61326
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.123656620
B_2	0.309276848
B_3	0.881511957
C_1	0.006447428
C_2	0.0222284402
C_3	107.29775100

Constants of Formula for dn/dT

D_0	1.86E-07
D_1	1.29E-08
D_2	-1.87E-11
E_0	5.25E-07
E_1	5.46E-10
λ_{TK} [µm]	0.182

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.880	0.720
1970	0.960	0.900
1530	0.994	0.986
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.996	0.990
436	0.996	0.989
420	0.996	0.990
405	0.996	0.990
400	0.996	0.990
390	0.995	0.988
380	0.993	0.983
370	0.991	0.977
365	0.987	0.969
350	0.971	0.930
334	0.920	0.820
320	0.800	0.570
310	0.610	0.290
300	0.350	0.070
290	0.100	
280	0.010	
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2712
$P_{C,s}$	0.5301
$P_{d,C}$	0.3029
$P_{e,d}$	0.2384
$P_{g,F}$	0.5472
$P_{i,h}$	0.7788

Relative Partial Dispersion P'

$P'_{s,t}$	0.2687
$P'_{C',s}$	0.5730
$P'_{d,C'}$	0.2525
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4855
$P'_{i,h}$	0.7717

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0167
$\Delta P_{C,s}$	-0.0069
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0002
$\Delta P_{i,g}$	-0.0075

Chemical Properties

CR	2
FR	1
SR	3.3
AR	1.2
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.6
T_g [°C]	592
$T_{10^{13}}$ [°C]	592
$T_{10^{7.6}}$ [°C]	746
c_p [J/(g*K)]	0.687
λ [W/(m•K)]	0.795
ρ [g/cm³]	3.19
E [10^3 N/mm²]	73
µ	0.252
K [10^{-6} mm²/N]	2.62
$HK_{0.1/20}$	530
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.7	2.4	3.0	-0.4	0.2	0.8
+20/+40	1.8	2.5	3.2	0.4	1.2	1.8
+60/+80	1.9	2.7	3.5	0.9	1.7	2.4

Datasheet

SCHOTT
glass made of ideas

N-BAK2
540597.286

n_d = 1.53996	ν_d = 59.71	$n_F - n_C$ = 0.009043
n_e = 1.54212	ν_e = 59.44	$n_{F'} - n_{C'}$ = 0.009120

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.51387
$n_{1970.1}$	1970.1	1.51871
$n_{1529.6}$	1529.6	1.52385
$n_{1060.0}$	1060.0	1.52919
n_t	1014.0	1.52980
n_s	852.1	1.53234
n_r	706.5	1.53564
n_C	656.3	1.53721
$n_{C'}$	643.8	1.53765
$n_{632.8}$	632.8	1.53806
n_D	589.3	1.53988
n_d	587.6	1.53996
n_e	546.1	1.54212
n_F	486.1	1.54625
$n_{F'}$	480.0	1.54677
n_g	435.8	1.55117
n_h	404.7	1.55525
n_i	365.0	1.56221
$n_{334.1}$	334.1	1.56971
$n_{312.6}$	312.6	1.57660
$n_{296.7}$	296.7	1.58287
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.016621540
B_2	0.319903051
B_3	0.937232995
C_1	0.005923838
C_2	0.0203828415
C_3	113.11841700

Constants of Formula for dn/dT

D_0	-1.45E-06
D_1	1.10E-08
D_2	4.89E-12
E_0	5.16E-07
E_1	3.05E-10
λ_{TK} [µm]	0.164

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.500
2325	0.830	0.630
1970	0.940	0.850
1530	0.994	0.984
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.995
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.998	0.994
460	0.997	0.992
436	0.997	0.992
420	0.997	0.993
405	0.997	0.993
400	0.997	0.993
390	0.997	0.992
380	0.996	0.990
370	0.996	0.989
365	0.994	0.986
350	0.988	0.971
334	0.963	0.910
320	0.870	0.700
310	0.690	0.400
300	0.400	0.100
290	0.160	
280	0.040	
270		
260		
250		

Color Code

λ80 / λ5	32/28

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2810
$P_{C,s}$	0.5382
$P_{d,C}$	0.3042
$P_{e,d}$	0.2385
$P_{g,F}$	0.5437
$P_{i,h}$	0.7695

Relative Partial Dispersion P'

$P'_{s,t}$	0.2787
$P'_{C',s}$	0.5817
$P'_{d,C'}$	0.2536
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4826
$P'_{i,h}$	0.7630

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0089
$\Delta P_{C,s}$	-0.0039
$\Delta P_{F,e}$	0.0004
$\Delta P_{g,F}$	0.0004
$\Delta P_{i,g}$	-0.0027

Chemical Properties

CR	2
FR	0
SR	1
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.0
T_g [°C]	554
$T_{10^{13}}$ [°C]	550
$T_{10^{7.6}}$ [°C]	727
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.920
ρ [g/cm³]	2.86
E [10^3 N/mm²]	71
µ	0.233
K [10^{-6} mm²/N]	2.60
$HK_{0.1/20}$	530
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.1	1.8	2.3	-0.9	-0.3	0.2
+20/+40	1.0	1.7	2.3	-0.3	0.3	0.9
+60/+80	1.1	1.8	2.4	0.1	0.8	1.4

Datasheet

SCHOTT
glass made of ideas

N-BAK4
569560.305

n_d = 1.56883	ν_d = 55.98	$n_F - n_C$ = 0.010162
n_e = 1.57125	ν_e = 55.70	$n_{F'} - n_{C'}$ = 0.010255

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54044
$n_{1970.1}$	1970.1	1.54561
$n_{1529.6}$	1529.6	1.55111
$n_{1060.0}$	1060.0	1.55688
n_t	1014.0	1.55755
n_s	852.1	1.56034
n_r	706.5	1.56400
n_C	656.3	1.56575
$n_{C'}$	643.8	1.56624
$n_{632.8}$	632.8	1.56670
n_D	589.3	1.56874
n_d	587.6	1.56883
n_e	546.1	1.57125
n_F	486.1	1.57591
$n_{F'}$	480.0	1.57649
n_g	435.8	1.58149
n_h	404.7	1.58614
n_i	365.0	1.59415
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.288346420
B_2	0.132817724
B_3	0.945395373
C_1	0.007799806
C_2	0.0315631177
C_3	105.96587500

Constants of Formula for dn/dT

D_0	3.06E-06
D_1	1.44E-08
D_2	-2.23E-11
E_0	5.46E-07
E_1	6.05E-10
λ_{TK} [µm]	0.189

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.540
2325	0.870	0.710
1970	0.959	0.900
1530	0.993	0.982
1060	0.998	0.995
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.998	0.994
460	0.996	0.989
436	0.995	0.988
420	0.995	0.987
405	0.993	0.983
400	0.992	0.980
390	0.987	0.967
380	0.976	0.940
370	0.954	0.890
365	0.930	0.840
350	0.790	0.550
334	0.350	0.070
320	0.010	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/33

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2749
$P_{C,s}$	0.5321
$P_{d,C}$	0.3029
$P_{e,d}$	0.2383
$P_{g,F}$	0.5487
$P_{i,h}$	0.7879

Relative Partial Dispersion P'

$P'_{s,t}$	0.2724
$P'_{C',s}$	0.5750
$P'_{d,C'}$	0.2524
$P'_{e,d}$	0.2361
$P'_{g,F'}$	0.4869
$P'_{i,h}$	0.7807

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0034
$\Delta P_{C,s}$	-0.0013
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0010
$\Delta P_{i,g}$	-0.0087

Chemical Properties

CR	1
FR	0
SR	1.2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.9
T_g [°C]	581
$T_{10^{13}}$ [°C]	569
$T_{10^{7.6}}$ [°C]	725
c_p [J/(g*K)]	0.680
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.05
E [10^3 N/mm²]	77
µ	0.240
K [10^{-6} mm²/N]	2.90
$HK_{0.1/20}$	550
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.0	3.7	4.4	0.9	1.5	2.2
+20/+40	3.1	3.9	4.7	1.8	2.6	3.3
+60/+80	3.3	4.2	5.0	2.2	3.1	3.9

Datasheet

SCHOTT
glass made of ideas

N-BAK4HT
569560.305

n_d = 1.56883	ν_d = 55.98	$n_F - n_C$ = 0.010162
n_e = 1.57125	ν_e = 55.70	$n_{F'} - n_{C'}$ = 0.010255

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54044
$n_{1970.1}$	1970.1	1.54561
$n_{1529.6}$	1529.6	1.55111
$n_{1060.0}$	1060.0	1.55688
n_t	1014.0	1.55755
n_s	852.1	1.56034
n_r	706.5	1.56400
n_C	656.3	1.56575
$n_{C'}$	643.8	1.56624
$n_{632.8}$	632.8	1.56670
n_D	589.3	1.56874
n_d	587.6	1.56883
n_e	546.1	1.57125
n_F	486.1	1.57591
$n_{F'}$	480.0	1.57649
n_g	435.8	1.58149
n_h	404.7	1.58614
n_i	365.0	1.59415
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.288346420
B_2	0.132817724
B_3	0.945395373
C_1	0.007799806
C_2	0.0315631177
C_3	105.96587500

Constants of Formula for dn/dT

D_0	3.06E-06
D_1	1.44E-08
D_2	-2.23E-11
E_0	5.46E-07
E_1	6.05E-10
λ_{TK} [µm]	0.189

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.670
2325	0.920	0.810
1970	0.979	0.950
1530	0.996	0.991
1060	0.999	0.998
700	0.998	0.996
660	0.998	0.996
620	0.998	0.996
580	0.998	0.996
546	0.998	0.996
500	0.998	0.995
460	0.997	0.993
436	0.997	0.992
420	0.996	0.991
405	0.994	0.985
400	0.993	0.983
390	0.989	0.972
380	0.979	0.950
370	0.959	0.900
365	0.940	0.860
350	0.810	0.600
334	0.390	0.100
320	0.020	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/32

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2749
$P_{C,s}$	0.5321
$P_{d,C}$	0.3029
$P_{e,d}$	0.2383
$P_{g,F}$	0.5487
$P_{i,h}$	0.7879

Relative Partial Dispersion P'

$P'_{s,t}$	0.2724
$P'_{C',s}$	0.5750
$P'_{d,C'}$	0.2524
$P'_{e,d}$	0.2361
$P'_{g,F'}$	0.4869
$P'_{i,h}$	0.7807

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0034
$\Delta P_{C,s}$	-0.0013
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0010
$\Delta P_{i,g}$	-0.0087

Chemical Properties

CR	1
FR	0
SR	1.2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.9
T_g [°C]	581
$T_{10^{13}}$ [°C]	569
$T_{10^{7.6}}$ [°C]	725
c_p [J/(g*K)]	0.680
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.05
E [10^3 N/mm²]	77
µ	0.240
K [10^{-6} mm²/N]	2.90
$HK_{0.1/20}$	550
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.0	3.7	4.4	0.9	1.5	2.2
+20/+40	3.1	3.9	4.7	1.8	2.6	3.3
+60/+80	3.3	4.2	5.0	2.2	3.1	3.9

Datasheet

SCHOTT
glass made of ideas

N-BAF4
606437.289

n_d = 1.60568	ν_d = 43.72	$n_F - n_C$ = 0.013853
n_e = 1.60897	ν_e = 43.43	$n_{F'} - n_{C'}$ = 0.014021

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57092
$n_{1970.1}$	1970.1	1.57685
$n_{1529.6}$	1529.6	1.58323
$n_{1060.0}$	1060.0	1.59016
n_t	1014.0	1.59099
n_s	852.1	1.59452
n_r	706.5	1.59926
n_C	656.3	1.60157
$n_{C'}$	643.8	1.60222
$n_{632.8}$	632.8	1.60282
n_D	589.3	1.60556
n_d	587.6	1.60568
n_e	546.1	1.60897
n_F	486.1	1.61542
$n_{F'}$	480.0	1.61624
n_g	435.8	1.62336
n_h	404.7	1.63022
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.420563280
B_2	0.102721269
B_3	1.143809760
C_1	0.009420154
C_2	0.0531087291
C_3	110.27885600

Constants of Formula for dn/dT

D_0	9.39E-07
D_1	1.24E-08
D_2	-9.00E-12
E_0	6.17E-07
E_1	8.42E-10
λ_{TK} [µm]	0.242

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.710	0.420
2325	0.840	0.640
1970	0.954	0.890
1530	0.991	0.977
1060	0.998	0.994
700	0.998	0.994
660	0.996	0.991
620	0.996	0.990
580	0.997	0.992
546	0.997	0.992
500	0.994	0.985
460	0.988	0.971
436	0.983	0.959
420	0.976	0.940
405	0.959	0.900
400	0.950	0.870
390	0.900	0.770
380	0.800	0.580
370	0.600	0.280
365	0.440	0.130
350	0.010	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2545
$P_{C,s}$	0.5089
$P_{d,C}$	0.2972
$P_{e,d}$	0.2372
$P_{g,F}$	0.5733
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2515
$P'_{C',s}$	0.5491
$P'_{d,C'}$	0.2473
$P'_{e,d}$	0.2344
$P'_{g,F'}$	0.5081
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0110
$\Delta P_{C,s}$	0.0041
$\Delta P_{F,e}$	0.0002
$\Delta P_{g,F}$	0.0030
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	580
$T_{10^{13}}$ [°C]	580
$T_{10^{7.6}}$ [°C]	709
c_p [J/(g*K)]	0.740
λ [W/(m•K)]	1.020
ρ [g/cm³]	2.89
E [10^3 N/mm²]	85
µ	0.231
K [10^{-6} mm²/N]	2.58
$HK_{0.1/20}$	610
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.2	3.1	4.1	0.1	0.9	1.9
+20/+40	2.2	3.3	4.5	0.9	1.9	3.0
+60/+80	2.4	3.6	4.9	1.3	2.5	3.8

Datasheet

SCHOTT
glass made of ideas

N-BAF10
670471.375

n_d = 1.67003	ν_d = 47.11	$n_F - n_C$ = 0.014222
n_e = 1.67341	ν_e = 46.83	$n_{F'} - n_{C'}$ = 0.014380

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.63524
$n_{1970.1}$	1970.1	1.64094
$n_{1529.6}$	1529.6	1.64714
$n_{1060.0}$	1060.0	1.65404
n_t	1014.0	1.65488
n_s	852.1	1.65849
n_r	706.5	1.66339
n_C	656.3	1.66578
$n_{C'}$	643.8	1.66645
$n_{632.8}$	632.8	1.66708
n_D	589.3	1.66990
n_d	587.6	1.67003
n_e	546.1	1.67341
n_F	486.1	1.68000
$n_{F'}$	480.0	1.68083
n_g	435.8	1.68801
n_h	404.7	1.69480
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.585149500
B_2	0.143559385
B_3	1.085212690
C_1	0.009266813
C_2	0.0424489805
C_3	105.61357300

Constants of Formula for dn/dT

D_0	3.79E-06
D_1	1.28E-08
D_2	-1.42E-11
E_0	5.84E-07
E_1	7.60E-10
λ_{TK} [µm]	0.220

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.450
2325	0.860	0.680
1970	0.967	0.920
1530	0.992	0.980
1060	0.998	0.994
700	0.998	0.994
660	0.996	0.990
620	0.996	0.991
580	0.996	0.990
546	0.996	0.990
500	0.992	0.981
460	0.987	0.967
436	0.981	0.954
420	0.976	0.940
405	0.959	0.900
400	0.950	0.880
390	0.920	0.800
380	0.850	0.660
370	0.720	0.440
365	0.630	0.310
350	0.180	0.010
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2539
$P_{C,s}$	0.5122
$P_{d,C}$	0.2989
$P_{e,d}$	0.2377
$P_{g,F}$	0.5629
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2511
$P'_{C',s}$	0.5533
$P'_{d,C'}$	0.2489
$P'_{e,d}$	0.2351
$P'_{g,F'}$	0.4990
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0024
$\Delta P_{C,s}$	-0.0005
$\Delta P_{F,e}$	-0.0003
$\Delta P_{g,F}$	-0.0016
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	4.3
AR	1.3
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.0
T_g [°C]	660
$T_{10^{13}}$ [°C]	652
$T_{10^{7.6}}$ [°C]	790
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.780
ρ [g/cm³]	3.75
E [10^3 N/mm²]	89
µ	0.271
K [10^{-6} mm²/N]	2.37
$HK_{0.1/20}$	620
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.7	4.7	5.6	1.5	2.4	3.3
+20/+40	3.8	4.9	6.0	2.4	3.5	4.5
+60/+80	4.0	5.2	6.4	2.9	4.1	5.3

Datasheet

N-BAF51
652450.333

n_d = 1.65224 ν_d = 44.96 $n_F - n_C$ = 0.014507
n_e = 1.65569 ν_e = 44.67 $n_{F'} - n_{C'}$ = 0.014677

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.61873
$n_{1970.1}$	1970.1	1.62390
$n_{1529.6}$	1529.6	1.62961
$n_{1060.0}$	1060.0	1.63619
n_t	1014.0	1.63701
n_s	852.1	1.64059
n_r	706.5	1.64551
n_C	656.3	1.64792
$n_{C'}$	643.8	1.64860
$n_{632.8}$	632.8	1.64924
n_D	589.3	1.65211
n_d	587.6	1.65224
n_e	546.1	1.65569
n_F	486.1	1.66243
$n_{F'}$	480.0	1.66328
n_g	435.8	1.67065
n_h	404.7	1.67766
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.515036230
B_2	0.153621958
B_3	1.154279090
C_1	0.009427347
C_2	0.0430826500
C_3	124.88986800

Constants of Formula for dn/dT

D_0	-2.84E-07
D_1	1.04E-08
D_2	-1.80E-11
E_0	7.01E-07
E_1	8.47E-10
λ_{TK} [µm]	0.219

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.750	0.480
2325	0.830	0.630
1970	0.950	0.870
1530	0.992	0.980
1060	0.997	0.993
700	0.997	0.993
660	0.996	0.990
620	0.996	0.990
580	0.997	0.992
546	0.996	0.991
500	0.994	0.985
460	0.988	0.970
436	0.982	0.956
420	0.976	0.940
405	0.963	0.910
400	0.954	0.890
390	0.920	0.820
380	0.860	0.690
370	0.740	0.470
365	0.640	0.330
350	0.210	0.020
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/34

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2463
$P_{C,s}$	0.5055
$P_{d,C}$	0.2977
$P_{e,d}$	0.2376
$P_{g,F}$	0.5670
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2435
$P'_{C',s}$	0.5460
$P'_{d,C'}$	0.2479
$P'_{e,d}$	0.2349
$P'_{g,F'}$	0.5024
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0064
$\Delta P_{C,s}$	-0.0022
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0012
$\Delta P_{i,g}$	

Chemical Properties

CR	2
FR	0
SR	5.4
AR	1.3
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.5
T_g [°C]	569
$T_{10^{13}}$ [°C]	574
$T_{10^{7.6}}$ [°C]	712
c_p [J/(g*K)]	0.840
λ [W/(m•K)]	0.670
ρ [g/cm³]	3.33
E [10^3 N/mm²]	91
µ	0.262
K [10^{-6} mm²/N]	2.22
$HK_{0.1/20}$	560
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.7	2.8	3.8	-0.5	0.5	1.5
+20/+40	1.7	2.9	4.1	0.3	1.5	2.7
+60/+80	1.8	3.1	4.4	0.7	2.0	3.3

Datasheet

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N-BAF52
609466.305

n_d = 1.60863	ν_d = 46.60	$n_F - n_C$ = 0.013061
n_e = 1.61173	ν_e = 46.30	$n_{F'} - n_{C'}$ = 0.013211

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57475
$n_{1970.1}$	1970.1	1.58067
$n_{1529.6}$	1529.6	1.58702
$n_{1060.0}$	1060.0	1.59381
n_t	1014.0	1.59461
n_s	852.1	1.59801
n_r	706.5	1.60254
n_C	656.3	1.60473
$n_{C'}$	643.8	1.60535
$n_{632.8}$	632.8	1.60593
n_D	589.3	1.60852
n_d	587.6	1.60863
n_e	546.1	1.61173
n_F	486.1	1.61779
$n_{F'}$	480.0	1.61856
n_g	435.8	1.62521
n_h	404.7	1.63157
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.439034330
B_2	0.096704605
B_3	1.098758180
C_1	0.009078001
C_2	0.0508212080
C_3	105.69185600

Constants of Formula for dn/dT

D_0	1.15E-06
D_1	1.27E-08
D_2	-5.08E-12
E_0	5.64E-07
E_1	6.38E-10
λ_{TK} [µm]	0.238

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.690	0.390
2325	0.830	0.630
1970	0.954	0.890
1530	0.990	0.975
1060	0.998	0.994
700	0.997	0.993
660	0.996	0.990
620	0.996	0.989
580	0.996	0.990
546	0.996	0.989
500	0.992	0.980
460	0.987	0.967
436	0.981	0.954
420	0.975	0.940
405	0.959	0.900
400	0.950	0.880
390	0.910	0.800
380	0.840	0.650
370	0.670	0.370
365	0.540	0.210
350	0.050	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2600
$P_{C,s}$	0.5147
$P_{d,C}$	0.2985
$P_{e,d}$	0.2374
$P_{g,F}$	0.5678
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2571
$P'_{C',s}$	0.5555
$P'_{d,C'}$	0.2485
$P'_{e,d}$	0.2348
$P'_{g,F'}$	0.5035
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0087
$\Delta P_{C,s}$	0.0031
$\Delta P_{F,e}$	0.0002
$\Delta P_{g,F}$	0.0024
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.3
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.8
T_g [°C]	594
$T_{10^{13}}$ [°C]	596
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.680
λ [W/(m•K)]	0.960
ρ [g/cm³]	3.05
E [10^3 N/mm²]	86
µ	0.237
K [10^{-6} mm²/N]	2.42
$HK_{0.1/20}$	600
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.3	3.1	4.0	0.2	0.9	1.8
+20/+40	2.3	3.3	4.3	0.9	1.9	2.9
+60/+80	2.5	3.6	4.7	1.4	2.5	3.6

Datasheet

SCHOTT
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N-BALF4
580539.311

n_d = 1.57956	ν_d = 53.87	$n_F - n_C$ = 0.010759
n_e = 1.58212	ν_e = 53.59	$n_{F'} - n_{C'}$ = 0.010863

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.55068
$n_{1970.1}$	1970.1	1.55577
$n_{1529.6}$	1529.6	1.56124
$n_{1060.0}$	1060.0	1.56707
n_t	1014.0	1.56776
n_s	852.1	1.57065
n_r	706.5	1.57447
n_C	656.3	1.57631
$n_{C'}$	643.8	1.57683
$n_{632.8}$	632.8	1.57731
n_D	589.3	1.57946
n_d	587.6	1.57956
n_e	546.1	1.58212
n_F	486.1	1.58707
$n_{F'}$	480.0	1.58769
n_g	435.8	1.59301
n_h	404.7	1.59799
n_i	365.0	1.60658
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.310041280
B_2	0.142038259
B_3	0.964929351
C_1	0.007965965
C_2	0.0330672072
C_3	109.19732000

Constants of Formula for dn/dT

D_0	5.33E-06
D_1	1.47E-08
D_2	-1.58E-11
E_0	5.75E-07
E_1	6.58E-10
λ_{TK} [µm]	0.195

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.800	0.580
2325	0.890	0.740
1970	0.967	0.920
1530	0.994	0.984
1060	0.997	0.993
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.995
500	0.997	0.993
460	0.994	0.986
436	0.993	0.983
420	0.992	0.981
405	0.988	0.970
400	0.985	0.964
390	0.976	0.940
380	0.959	0.900
370	0.920	0.820
365	0.890	0.750
350	0.680	0.380
334	0.160	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/33

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2687
$P_{C,s}$	0.5265
$P_{d,C}$	0.3019
$P_{e,d}$	0.2382
$P_{g,F}$	0.5520
$P_{i,h}$	0.7986

Relative Partial Dispersion P'

$P'_{s,t}$	0.2661
$P'_{C',s}$	0.5689
$P'_{d,C'}$	0.2515
$P'_{e,d}$	0.2359
$P'_{g,F'}$	0.4897
$P'_{i,h}$	0.7909

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0053
$\Delta P_{C,s}$	-0.0019
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0012
$\Delta P_{i,g}$	-0.0114

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	578
$T_{10^{13}}$ [°C]	584
$T_{10^{7.6}}$ [°C]	661
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.850
ρ [g/cm³]	3.11
E [10^3 N/mm²]	77
µ	0.245
K [10^{-6} mm²/N]	3.01
$HK_{0.1/20}$	540
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.1	4.9	5.6	2.0	2.7	3.4
+20/+40	4.2	5.1	6.0	2.9	3.7	4.6
+60/+80	4.4	5.4	6.4	3.4	4.3	5.3

Datasheet

SCHOTT
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N-BALF5
547536.261

n_d = 1.54739	ν_d = 53.63	$n_F - n_C$ = 0.010207
n_e = 1.54982	ν_e = 53.36	$n_{F'} - n_{C'}$ = 0.010303

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	
$n_{1970.1}$	1970.1	
$n_{1529.6}$	1529.6	
$n_{1060.0}$	1060.0	1.53529
n_t	1014.0	1.53598
n_s	852.1	1.53885
n_r	706.5	1.54255
n_C	656.3	1.54430
$n_{C'}$	643.8	1.54479
$n_{632.8}$	632.8	1.54525
n_D	589.3	1.54730
n_d	587.6	1.54739
n_e	546.1	1.54982
n_F	486.1	1.55451
$n_{F'}$	480.0	1.55510
n_g	435.8	1.56016
n_h	404.7	1.56491
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.283859650
B_2	0.071930094
B_3	1.050489270
C_1	0.008258160
C_2	0.0441920027
C_3	107.09732400

Constants of Formula for dn/dT

D_0	1.14E-06
D_1	1.29E-08
D_2	-1.46E-11
E_0	5.02E-07
E_1	5.87E-10
λ_{TK} [µm]	0.219

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.620	0.300
2325	0.760	0.500
1970	0.920	0.810
1530	0.989	0.973
1060	0.996	0.991
700	0.998	0.995
660	0.997	0.993
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.995	0.988
436	0.994	0.984
420	0.991	0.978
405	0.986	0.965
400	0.983	0.957
390	0.967	0.920
380	0.940	0.850
370	0.870	0.710
365	0.820	0.600
350	0.440	0.130
334	0.010	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/34

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2810
$P_{C,s}$	0.5345
$P_{d,C}$	0.3025
$P_{e,d}$	0.2380
$P_{g,F}$	0.5532
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2783
$P'_{C',s}$	0.5771
$P'_{d,C'}$	0.2520
$P'_{e,d}$	0.2357
$P'_{g,F'}$	0.4909
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0161
$\Delta P_{C,s}$	0.0066
$\Delta P_{F,e}$	-0.0007
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	558
$T_{10^{13}}$ [°C]	559
$T_{10^{7.6}}$ [°C]	711
c_p [J/(g*K)]	0.810
λ [W/(m•K)]	1.050
ρ [g/cm³]	2.61
E [10^3 N/mm²]	81
µ	0.214
K [10^{-6} mm²/N]	2.76
$HK_{0.1/20}$	600
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.1	2.8	3.5	0.1	0.7	1.3
+20/+40	2.1	2.9	3.7	0.8	1.6	2.3
+60/+80	2.3	3.1	3.9	1.3	2.1	2.9

Datasheet

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N-SK2
607567.355

n_d = 1.60738	ν_d = 56.65	$n_F - n_C$ = 0.010722
n_e = 1.60994	ν_e = 56.37	$n_{F'} - n_{C'}$ = 0.010821

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57881
$n_{1970.1}$	1970.1	1.58378
$n_{1529.6}$	1529.6	1.58914
$n_{1060.0}$	1060.0	1.59490
n_t	1014.0	1.59558
n_s	852.1	1.59847
n_r	706.5	1.60230
n_C	656.3	1.60414
$n_{C'}$	643.8	1.60465
$n_{632.8}$	632.8	1.60513
n_D	589.3	1.60729
n_d	587.6	1.60738
n_e	546.1	1.60994
n_F	486.1	1.61486
$n_{F'}$	480.0	1.61547
n_g	435.8	1.62073
n_h	404.7	1.62562
n_i	365.0	1.63398
$n_{334.1}$	334.1	1.64304
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.281890120
B_2	0.257738258
B_3	0.968186040
C_1	0.007271916
C_2	0.0242823527
C_3	110.37777300

Constants of Formula for dn/dT

D_0	3.80E-06
D_1	1.41E-08
D_2	2.28E-11
E_0	6.44E-07
E_1	8.03E-11
λ_{TK} [µm]	0.108

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.820	0.600
2325	0.900	0.760
1970	0.971	0.930
1530	0.995	0.988
1060	0.998	0.995
700	0.998	0.995
660	0.998	0.994
620	0.998	0.994
580	0.998	0.995
546	0.998	0.995
500	0.996	0.990
460	0.993	0.983
436	0.993	0.982
420	0.994	0.984
405	0.994	0.985
400	0.994	0.984
390	0.992	0.979
380	0.988	0.970
370	0.976	0.940
365	0.967	0.920
350	0.910	0.780
334	0.750	0.490
320	0.500	0.180
310	0.280	0.040
300	0.100	
290	0.020	
280		
270		
260		
250		

Color Code

λ80 / λ5	33/28

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2690
$P_{C,s}$	0.5285
$P_{d,C}$	0.3027
$P_{e,d}$	0.2384
$P_{g,F}$	0.5477
$P_{i,h}$	0.7802

Relative Partial Dispersion P'

$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5713
$P'_{d,C'}$	0.2523
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4860
$P'_{i,h}$	0.7730

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0162
$\Delta P_{C,s}$	-0.0064
$\Delta P_{F,e}$	0.0003
$\Delta P_{g,F}$	-0.0008
$\Delta P_{i,g}$	-0.0130

Chemical Properties

CR	2
FR	0
SR	2.2
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	659
$T_{10^{13}}$ [°C]	659
$T_{10^{7.6}}$ [°C]	823
c_p [J/(g*K)]	0.595
λ [W/(m•K)]	0.776
ρ [g/cm³]	3.55
E [10^3 N/mm²]	78
µ	0.263
K [10^{-6} mm²/N]	2.31
$HK_{0.1/20}$	550
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.7	4.6	5.3	1.5	2.4	3.1
+20/+40	3.6	4.5	5.3	2.3	3.1	3.9
+60/+80	4.0	4.9	5.7	2.9	3.8	4.5

Datasheet

SCHOTT
glass made of ideas

N-SK2HT
607567.355

n_d = 1.60738	ν_d = 56.65	$n_F - n_C$ = 0.010722
n_e = 1.60994	ν_e = 56.37	$n_{F'} - n_{C'}$ = 0.010821

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57881
$n_{1970.1}$	1970.1	1.58378
$n_{1529.6}$	1529.6	1.58914
$n_{1060.0}$	1060.0	1.59490
n_t	1014.0	1.59558
n_s	852.1	1.59847
n_r	706.5	1.60230
n_C	656.3	1.60414
$n_{C'}$	643.8	1.60465
$n_{632.8}$	632.8	1.60513
n_D	589.3	1.60729
n_d	587.6	1.60738
n_e	546.1	1.60994
n_F	486.1	1.61486
$n_{F'}$	480.0	1.61547
n_g	435.8	1.62073
n_h	404.7	1.62562
n_i	365.0	1.63398
$n_{334.1}$	334.1	1.64304
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.281890120
B_2	0.257738258
B_3	0.968186040
C_1	0.007271916
C_2	0.0242823527
C_3	110.37777300

Constants of Formula for dn/dT

D_0	3.80E-06
D_1	1.41E-08
D_2	2.28E-11
E_0	6.44E-07
E_1	8.03E-11
λ_{TK} [µm]	0.108

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.590
2325	0.890	0.750
1970	0.976	0.940
1530	0.995	0.987
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.996
620	0.998	0.996
580	0.999	0.997
546	0.999	0.997
500	0.998	0.995
460	0.997	0.992
436	0.996	0.991
420	0.997	0.992
405	0.996	0.991
400	0.996	0.990
390	0.994	0.986
380	0.992	0.980
370	0.987	0.968
365	0.983	0.957
350	0.955	0.890
334	0.870	0.700
320	0.650	0.350
310	0.390	0.090
300	0.130	0.000
290	0.010	
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	33/28

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2690
$P_{C,s}$	0.5285
$P_{d,C}$	0.3027
$P_{e,d}$	0.2384
$P_{g,F}$	0.5477
$P_{i,h}$	0.7802

Relative Partial Dispersion P'

$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5713
$P'_{d,C'}$	0.2523
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4860
$P'_{i,h}$	0.7730

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0162
$\Delta P_{C,s}$	-0.0064
$\Delta P_{F,e}$	0.0003
$\Delta P_{g,F}$	-0.0008
$\Delta P_{i,g}$	-0.0130

Chemical Properties

CR	2
FR	0
SR	2.2
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	659
$T_{10^{13}}$ [°C]	659
$T_{10^{7.6}}$ [°C]	823
c_p [J/(g*K)]	0.595
λ [W/(m•K)]	0.776
ρ [g/cm³]	3.55
E [10^3 N/mm²]	78
µ	0.263
K [10^{-6} mm²/N]	2.31
$HK_{0.1/20}$	550
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.7	4.6	5.3	1.5	2.4	3.1
+20/+40	3.6	4.5	5.3	2.3	3.1	3.9
+60/+80	4.0	4.9	5.7	2.9	3.8	4.5

Datasheet

SCHOTT
glass made of ideas

N-SK4
613586.354

n_d = 1.61272	ν_d = 58.63	$n_F - n_C$ = 0.010450
n_e = 1.61521	ν_e = 58.37	$n_{F'} - n_{C'}$ = 0.010541

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58282
$n_{1970.1}$	1970.1	1.58835
$n_{1529.6}$	1529.6	1.59422
$n_{1060.0}$	1060.0	1.60032
n_t	1014.0	1.60102
n_s	852.1	1.60393
n_r	706.5	1.60774
n_C	656.3	1.60954
$n_{C'}$	643.8	1.61005
$n_{632.8}$	632.8	1.61052
n_D	589.3	1.61262
n_d	587.6	1.61272
n_e	546.1	1.61521
n_F	486.1	1.61999
$n_{F'}$	480.0	1.62059
n_g	435.8	1.62568
n_h	404.7	1.63042
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.329937410
B_2	0.228542996
B_3	0.988465211
C_1	0.007168741
C_2	0.0246455892
C_3	100.88636400

Constants of Formula for dn/dT

D_0	7.96E-07
D_1	1.30E-08
D_2	-1.31E-11
E_0	4.36E-07
E_1	6.01E-10
λ_{TK} [µm]	0.179

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.690	0.390
2325	0.830	0.620
1970	0.959	0.900
1530	0.991	0.977
1060	0.997	0.993
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.994	0.985
436	0.993	0.983
420	0.993	0.983
405	0.992	0.979
400	0.990	0.975
390	0.984	0.960
380	0.971	0.930
370	0.950	0.870
365	0.930	0.830
350	0.820	0.610
334	0.530	0.200
320	0.100	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/32

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2792
$P_{C,s}$	0.5366
$P_{d,C}$	0.3039
$P_{e,d}$	0.2384
$P_{g,F}$	0.5448
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2768
$P'_{C',s}$	0.5799
$P'_{d,C'}$	0.2533
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4835
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0073
$\Delta P_{C,s}$	-0.0030
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	

Chemical Properties

CR	3
FR	1
SR	51.2
AR	2
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	658
$T_{10^{13}}$ [°C]	646
$T_{10^{7.6}}$ [°C]	769
c_p [J/(g*K)]	0.570
λ [W/(m•K)]	0.830
ρ [g/cm³]	3.54
E [10^3 N/mm²]	84
µ	0.261
K [10^{-6} mm²/N]	1.92
$HK_{0.1/20}$	580
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.0	2.6	3.1	-0.1	0.4	0.9
+20/+40	2.1	2.8	3.4	0.7	1.4	2.0
+60/+80	2.3	3.0	3.7	1.2	1.9	2.6

Datasheet

SCHOTT
glass made of ideas

N-SK5
589613.330

n_d = 1.58913	ν_d = 61.27	$n_F - n_C$ = 0.009616
n_e = 1.59142	ν_e = 61.02	$n_{F'} - n_{C'}$ = 0.009692

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.55966
$n_{1970.1}$	1970.1	1.56539
$n_{1529.6}$	1529.6	1.57140
$n_{1060.0}$	1060.0	1.57747
n_t	1014.0	1.57815
n_s	852.1	1.58094
n_r	706.5	1.58451
n_C	656.3	1.58619
$n_{C'}$	643.8	1.58666
$n_{632.8}$	632.8	1.58710
n_D	589.3	1.58904
n_d	587.6	1.58913
n_e	546.1	1.59142
n_F	486.1	1.59581
$n_{F'}$	480.0	1.59635
n_g	435.8	1.60100
n_h	404.7	1.60530
n_i	365.0	1.61260
$n_{334.1}$	334.1	1.62043
$n_{312.6}$	312.6	1.62759
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.991463823
B_2	0.495982121
B_3	0.987393925
C_1	0.005227305
C_2	0.0172733646
C_3	98.35945790

Constants of Formula for dn/dT

D_0	3.50E-06
D_1	1.22E-08
D_2	6.38E-11
E_0	2.46E-07
E_1	-3.34E-11
λ_{TK} [µm]	0.278

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.680	0.380
2325	0.840	0.640
1970	0.963	0.910
1530	0.992	0.980
1060	0.999	0.997
700	0.998	0.995
660	0.998	0.994
620	0.997	0.993
580	0.998	0.995
546	0.998	0.996
500	0.998	0.994
460	0.996	0.989
436	0.995	0.987
420	0.994	0.986
405	0.993	0.983
400	0.992	0.981
390	0.988	0.971
380	0.984	0.960
370	0.976	0.940
365	0.971	0.930
350	0.920	0.820
334	0.800	0.580
320	0.590	0.270
310	0.400	0.100
300	0.210	0.020
290	0.090	
280	0.030	
270		
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2904
$P_{C,s}$	0.5460
$P_{d,C}$	0.3055
$P_{e,d}$	0.2386
$P_{g,F}$	0.5400
$P_{i,h}$	0.7591

Relative Partial Dispersion P'

$P'_{s,t}$	0.2881
$P'_{C',s}$	0.5901
$P'_{d,C'}$	0.2547
$P'_{e,d}$	0.2367
$P'_{g,F'}$	0.4796
$P'_{i,h}$	0.7531

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0008
$\Delta P_{C,s}$	0.0003
$\Delta P_{F,e}$	-0.0002
$\Delta P_{g,F}$	-0.0007
$\Delta P_{i,g}$	-0.0045

Chemical Properties

CR	3
FR	1
SR	4.4
AR	2
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.5
T_g [°C]	660
$T_{10^{13}}$ [°C]	657
$T_{10^{7.6}}$ [°C]	791
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.990
ρ [g/cm³]	3.30
E [10^3 N/mm²]	84
µ	0.256
K [10^{-6} mm²/N]	2.16
$HK_{0.1/20}$	590
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.5	4.0	4.6	1.4	1.9	2.4
+20/+40	3.2	3.7	4.3	1.9	2.3	2.9
+60/+80	3.6	4.1	4.7	2.6	3.0	3.6

Datasheet

SCHOTT
glass made of ideas

N-SK5HTi
589613.330

n_d = 1.58913	ν_d = 61.27	$n_F - n_C$ = 0.009616
n_e = 1.59142	ν_e = 61.02	$n_{F'} - n_{C'}$ = 0.009692

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.55966
$n_{1970.1}$	1970.1	1.56539
$n_{1529.6}$	1529.6	1.57140
$n_{1060.0}$	1060.0	1.57747
n_t	1014.0	1.57815
n_s	852.1	1.58094
n_r	706.5	1.58451
n_C	656.3	1.58619
$n_{C'}$	643.8	1.58666
$n_{632.8}$	632.8	1.58710
n_D	589.3	1.58904
n_d	587.6	1.58913
n_e	546.1	1.59142
n_F	486.1	1.59581
$n_{F'}$	480.0	1.59635
n_g	435.8	1.60100
n_h	404.7	1.60530
n_i	365.0	1.61260
$n_{334.1}$	334.1	1.62043
$n_{312.6}$	312.6	1.62759
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.991463823
B_2	0.495982121
B_3	0.987393925
C_1	0.005227305
C_2	0.0172733646
C_3	98.35945790

Constants of Formula for dn/dT

D_0	3.50E-06
D_1	1.22E-08
D_2	6.38E-11
E_0	2.46E-07
E_1	-3.34E-11
λ_{TK} [µm]	0.278

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.957	0.900
2325	0.989	0.973
1970	0.990	0.976
1530	0.995	0.987
1060	1.000	0.999
700	0.999	0.998
660	0.999	0.998
620	0.998	0.995
580	0.998	0.995
546	0.998	0.996
500	0.998	0.994
460	0.997	0.993
436	0.997	0.992
420	0.997	0.992
405	0.997	0.993
400	0.997	0.992
390	0.997	0.992
380	0.996	0.989
370	0.993	0.983
365	0.991	0.978
350	0.981	0.952
334	0.940	0.870
320	0.840	0.650
310	0.720	0.440
300	0.540	0.220
290	0.320	0.060
280		
270		
260		
250		

Color Code

λ80 / λ5	0,000000

Remarks

i-line glass

Relative Partial Dispersion P

$P_{s,t}$	0.2904
$P_{C,s}$	0.5460
$P_{d,C}$	0.3055
$P_{e,d}$	0.2386
$P_{g,F}$	0.5400
$P_{i,h}$	0.7591

Relative Partial Dispersion P'

$P'_{s,t}$	0.2881
$P'_{C',s}$	0.5901
$P'_{d,C'}$	0.2547
$P'_{e,d}$	0.2367
$P'_{g,F'}$	0.4796
$P'_{i,h}$	0.7531

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0008
$\Delta P_{C,s}$	0.0003
$\Delta P_{F,e}$	-0.0002
$\Delta P_{g,F}$	-0.0007
$\Delta P_{i,g}$	-0.0045

Chemical Properties

CR	3
FR	1
SR	4.4
AR	2
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.5
T_g [°C]	660
$T_{10^{13}}$ [°C]	657
$T_{10^{7.6}}$ [°C]	791
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.990
ρ [g/cm³]	3.30
E [10^3 N/mm²]	84
µ	0.256
K [10^{-6} mm²/N]	2.16
$HK_{0.1/20}$	590
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.5	4.0	4.6	1.4	1.9	2.4
+20/+40	3.2	3.7	4.3	1.9	2.3	2.9
+60/+80	3.6	4.1	4.7	2.6	3.0	3.6

Datasheet

N-SK11
564608.308

n_d = 1.56384 ν_d = 60.80 $n_F - n_C$ = 0.009274
n_e = 1.56605 ν_e = 60.55 $n_{F'} - n_{C'}$ = 0.009349

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.53598
$n_{1970.1}$	1970.1	1.54131
$n_{1529.6}$	1529.6	1.54693
$n_{1060.0}$	1060.0	1.55266
n_t	1014.0	1.55330
n_s	852.1	1.55597
n_r	706.5	1.55939
n_C	656.3	1.56101
$n_{C'}$	643.8	1.56146
$n_{632.8}$	632.8	1.56188
n_D	589.3	1.56376
n_d	587.6	1.56384
n_e	546.1	1.56605
n_F	486.1	1.57028
$n_{F'}$	480.0	1.57081
n_g	435.8	1.57530
n_h	404.7	1.57946
n_i	365.0	1.58653
$n_{334.1}$	334.1	1.59414
$n_{312.6}$	312.6	1.60110
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.179636310
B_2	0.229817295
B_3	0.935789652
C_1	0.006802821
C_2	0.0219737205
C_3	101.51323200

Constants of Formula for dn/dT

D_0	2.14E-06
D_1	1.27E-08
D_2	-7.21E-11
E_0	3.51E-07
E_1	5.41E-10
λ_{TK} [µm]	0.238

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.78	0.54
2325	0.88	0.73
1970	0.967	0.92
1530	0.994	0.984
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.999	0.997
500	0.998	0.994
460	0.996	0.990
436	0.995	0.988
420	0.994	0.985
405	0.992	0.980
400	0.990	0.975
390	0.988	0.970
380	0.985	0.963
370	0.980	0.950
365	0.976	0.94
350	0.950	0.88
334	0.87	0.71
320	0.70	0.41
310	0.48	0.16
300	0.21	0.02
290	0.06	
280		
270		
260		
250		

Color Code

λ80 / λ5	34/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2874
$P_{C,s}$	0.5436
$P_{d,C}$	0.3051
$P_{e,d}$	0.2385
$P_{g,F}$	0.5411
$P_{i,h}$	0.7626

Relative Partial Dispersion P'

$P'_{s,t}$	0.2850
$P'_{C',s}$	0.5875
$P'_{d,C'}$	0.2544
$P'_{e,d}$	0.2366
$P'_{g,F'}$	0.4805
$P'_{i,h}$	0.7564

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0024
$\Delta P_{C,s}$	-0.0011
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	-0.0037

Chemical Properties

CR	2
FR	0
SR	2
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.6
T_g [°C]	610
$T_{10^{13}}$ [°C]	601
$T_{10^{7.6}}$ [°C]	760
c_p [J/(g*K)]	0.650
λ [W/(m•K)]	0.920
ρ [g/cm³]	3.08
E [10^3 N/mm²]	79
µ	0.239
K [10^{-6} mm²/N]	2.45
$HK_{0.1/20}$	570
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.4	2.8	3.4	0.3	0.7	1.2
+20/+40	2.6	3.2	3.8	1.2	1.8	2.4
+60/+80	2.5	3.2	3.9	1.5	2.1	2.8

Datasheet

SCHOTT
glass made of ideas

N-SK14
603606.343

n_d = 1.60311	ν_d = 60.60	$n_F - n_C$ = 0.009953
n_e = 1.60548	ν_e = 60.34	$n_{F'} - n_{C'}$ = 0.010034

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57336
$n_{1970.1}$	1970.1	1.57903
$n_{1529.6}$	1529.6	1.58502
$n_{1060.0}$	1060.0	1.59113
n_t	1014.0	1.59182
n_s	852.1	1.59467
n_r	706.5	1.59834
n_C	656.3	1.60008
$n_{C'}$	643.8	1.60056
$n_{632.8}$	632.8	1.60101
n_D	589.3	1.60302
n_d	587.6	1.60311
n_e	546.1	1.60548
n_F	486.1	1.61003
$n_{F'}$	480.0	1.61059
n_g	435.8	1.61542
n_h	404.7	1.61988
n_i	365.0	1.62748
$n_{334.1}$	334.1	1.63564
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	0.936155374
B_2	0.594052018
B_3	1.043745830
C_1	0.004617165
C_2	0.0168859270
C_3	103.73626500

Constants of Formula for dn/dT

D_0	1.58E-06
D_1	1.22E-08
D_2	-8.04E-12
E_0	4.46E-07
E_1	5.22E-10
λ_{TK} [µm]	0.150

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.68	0.38
2325	0.83	0.63
1970	0.959	0.90
1530	0.992	0.980
1060	0.998	0.994
700	0.998	0.995
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.994	0.985
420	0.993	0.983
405	0.991	0.978
400	0.990	0.975
390	0.988	0.970
380	0.981	0.952
370	0.971	0.93
365	0.963	0.91
350	0.91	0.79
334	0.77	0.52
320	0.55	0.22
310	0.35	0.07
300	0.16	
290	0.04	
280		
270		
260		
250		

Color Code

λ80 / λ5	35/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2864
$P_{C,s}$	0.5427
$P_{d,C}$	0.3049
$P_{e,d}$	0.2385
$P_{g,F}$	0.5415
$P_{i,h}$	0.7631

Relative Partial Dispersion P'

$P'_{s,t}$	0.2841
$P'_{C',s}$	0.5865
$P'_{d,C'}$	0.2542
$P'_{e,d}$	0.2366
$P'_{g,F'}$	0.4808
$P'_{i,h}$	0.7569

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0033
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	-0.0003
$\Delta P_{i,g}$	-0.0044

Chemical Properties

CR	4
FR	2
SR	51.3
AR	2
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.0
T_g [°C]	654
$T_{10^{13}}$ [°C]	638
$T_{10^{7.6}}$ [°C]	773
c_p [J/(g*K)]	0.636
λ [W/(m•K)]	0.851
ρ [g/cm³]	3.43
E [10^3 N/mm²]	86
µ	0.261
K [10^{-6} mm²/N]	2.00
$HK_{0.1/20}$	600
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.5	3.0	3.5	0.3	0.8	1.3
+20/+40	2.4	3.1	3.7	1.1	1.7	2.3
+60/+80	2.6	3.3	4.0	1.5	2.2	2.8

Datasheet

SCHOTT
glass made of ideas

N-SK16
620603.358

n_d = 1.62041	ν_d = 60.32	$n_F - n_C$ = 0.010285
n_e = 1.62286	ν_e = 60.08	$n_{F'} - n_{C'}$ = 0.010368

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58919
$n_{1970.1}$	1970.1	1.59523
$n_{1529.6}$	1529.6	1.60157
$n_{1060.0}$	1060.0	1.60799
n_t	1014.0	1.60871
n_s	852.1	1.61167
n_r	706.5	1.61548
n_C	656.3	1.61727
$n_{C'}$	643.8	1.61777
$n_{632.8}$	632.8	1.61824
n_D	589.3	1.62032
n_d	587.6	1.62041
n_e	546.1	1.62286
n_F	486.1	1.62756
$n_{F'}$	480.0	1.62814
n_g	435.8	1.63312
n_h	404.7	1.63773
n_i	365.0	1.64559
$n_{334.1}$	334.1	1.65403
$n_{312.6}$	312.6	1.66178
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.343177740
B_2	0.241144399
B_3	0.994317969
C_1	0.007046873
C_2	0.0229005000
C_3	92.75085260

Constants of Formula for dn/dT

D_0	-2.37E-08
D_1	1.32E-08
D_2	-1.29E-11
E_0	4.09E-07
E_1	5.17E-10
λ_{TK} [µm]	0.170

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.580	0.260
2325	0.780	0.540
1970	0.950	0.880
1530	0.989	0.973
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.994
620	0.997	0.993
580	0.998	0.994
546	0.998	0.994
500	0.996	0.991
460	0.994	0.984
436	0.992	0.981
420	0.992	0.979
405	0.990	0.974
400	0.988	0.970
390	0.982	0.956
380	0.971	0.930
370	0.954	0.890
365	0.940	0.860
350	0.870	0.700
334	0.690	0.400
320	0.410	0.110
310	0.210	0.020
300	0.060	
290	0.010	
280		
270		
260		
250		

Color Code

λ80 / λ5	36/30

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2885
$P_{C,s}$	0.5443
$P_{d,C}$	0.3051
$P_{e,d}$	0.2385
$P_{g,F}$	0.5412
$P_{i,h}$	0.7633

Relative Partial Dispersion P'

$P'_{s,t}$	0.2861
$P'_{C',s}$	0.5882
$P'_{d,C'}$	0.2544
$P'_{e,d}$	0.2366
$P'_{g,F'}$	0.4805
$P'_{i,h}$	0.7572

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0016
$\Delta P_{C,s}$	0.0007
$\Delta P_{F,e}$	-0.0003
$\Delta P_{g,F}$	-0.0011
$\Delta P_{i,g}$	-0.0067

Chemical Properties

CR	4
FR	4
SR	53.3
AR	3.3
PR	3.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.3
T_g [°C]	636
$T_{10^{13}}$ [°C]	633
$T_{10^{7.6}}$ [°C]	750
c_p [J/(g*K)]	0.578
λ [W/(m•K)]	0.818
ρ [g/cm³]	3.58
E [10^3 N/mm²]	89
µ	0.264
K [10^{-6} mm²/N]	1.90
$HK_{0.1/20}$	600
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.6	2.2	2.6	-0.5	-0.1	0.4
+20/+40	1.7	2.3	2.9	0.3	0.9	1.4
+60/+80	1.9	2.6	3.2	0.8	1.5	2.1

Datasheet

SCHOTT
glass made of ideas

P-SK57
587596.301

n_d = 1.58700	ν_d = 59.60	$n_F - n_C$ = 0.009849
n_e = 1.58935	ν_e = 59.36	$n_{F'} - n_{C'}$ = 0.009928

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.55688
$n_{1970.1}$	1970.1	1.56271
$n_{1529.6}$	1529.6	1.56885
$n_{1060.0}$	1060.0	1.57507
n_t	1014.0	1.57576
n_s	852.1	1.57862
n_r	706.5	1.58227
n_C	656.3	1.58399
$n_{C'}$	643.8	1.58447
$n_{632.8}$	632.8	1.58492
n_D	589.3	1.58691
n_d	587.6	1.58700
n_e	546.1	1.58935
n_F	486.1	1.59384
$n_{F'}$	480.0	1.59440
n_g	435.8	1.59917
n_h	404.7	1.60359
n_i	365.0	1.61112
$n_{334.1}$	334.1	1.61923
$n_{312.6}$	312.6	1.62669
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.310534140
B_2	0.169376189
B_3	1.109877140
C_1	0.007408772
C_2	0.0254563489
C_3	107.75108700

Constants of Formula for dn/dT

D_0	2.60E-06
D_1	9.40E-09
D_2	-2.30E-11
E_0	4.90E-07
E_1	5.96E-10
λ_{TK} [µm]	0.178

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.690	0.400
2325	0.830	0.630
1970	0.954	0.890
1530	0.991	0.978
1060	0.999	0.997
700	0.999	0.997
660	0.999	0.997
620	0.999	0.997
580	0.999	0.997
546	0.999	0.997
500	0.998	0.995
460	0.996	0.991
436	0.996	0.989
420	0.995	0.987
405	0.994	0.985
400	0.994	0.984
390	0.992	0.980
380	0.989	0.973
370	0.984	0.960
365	0.980	0.950
350	0.950	0.870
334	0.820	0.610
320	0.480	0.160
310	0.120	0.000
300	0.000	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	34/31

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2902
$P_{C,s}$	0.5454
$P_{d,C}$	0.3053
$P_{e,d}$	0.2385
$P_{g,F}$	0.5412
$P_{i,h}$	0.7644

Relative Partial Dispersion P'

$P'_{s,t}$	0.2878
$P'_{C',s}$	0.5894
$P'_{d,C'}$	0.2545
$P'_{e,d}$	0.2366
$P'_{g,F'}$	0.4806
$P'_{i,h}$	0.7583

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0079
$\Delta P_{C,s}$	0.0036
$\Delta P_{F,e}$	-0.0008
$\Delta P_{g,F}$	-0.0024
$\Delta P_{i,g}$	-0.0115

Chemical Properties

CR	4
FR	3
SR	52.3
AR	2
PR	3
SR-J	4
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.9
T_g [°C]	493
$T_{10^{13}}$ [°C]	494
$T_{10^{7.6}}$ [°C]	593
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	1.010
AT [°C]	522
ρ [g/cm^3]	3.01
E [10^3 N/mm^2]	93
µ	0.249
K [10^{-6} mm^2/N]	2.17
$HK_{0.1/20}$	535
HG	3
Abrasion Aa	124

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.0	3.7	4.2	0.9	1.5	2.0
+20/+40	2.9	3.6	4.3	1.5	2.2	2.9
+60/+80	2.9	3.7	4.4	1.8	2.6	3.3

Datasheet

SCHOTT
glass made of ideas

P-SK57Q1
586595.301

n_d = 1.58600	ν_d = 59.50	$n_F - n_C$ = 0.009849
n_e = 1.58835	ν_e = 59.26	$n_{F'} - n_{C'}$ = 0.009928

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.55583
$n_{1970.1}$	1970.1	1.56169
$n_{1529.6}$	1529.6	1.56784
$n_{1060.0}$	1060.0	1.57407
n_t	1014.0	1.57476
n_s	852.1	1.57762
n_r	706.5	1.58127
n_C	656.3	1.58299
$n_{C'}$	643.8	1.58347
$n_{632.8}$	632.8	1.58392
n_D	589.3	1.58591
n_d	587.6	1.58600
n_e	546.1	1.58835
n_F	486.1	1.59284
$n_{F'}$	480.0	1.59340
n_g	435.8	1.59817
n_h	404.7	1.60260
n_i	365.0	1.61013
$n_{334.1}$	334.1	1.61826
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.305364830
B_2	0.171434328
B_3	1.101172190
C_1	0.007364088
C_2	0.0255786047
C_3	106.72606000

Constants of Formula for dn/dT

D_0	0.00E00
D_1	0.00E00
D_2	0.00E00
E_0	0.00E00
E_1	0.00E00
λ_{TK} [µm]	0.000

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.690	0.400
2325	0.830	0.630
1970	0.954	0.890
1530	0.991	0.978
1060	0.999	0.997
700	0.999	0.997
660	0.999	0.997
620	0.999	0.997
580	0.999	0.997
546	0.999	0.997
500	0.998	0.995
460	0.996	0.991
436	0.996	0.989
420	0.995	0.987
405	0.994	0.985
400	0.994	0.984
390	0.992	0.980
380	0.989	0.973
370	0.984	0.960
365	0.980	0.950
350	0.950	0.870
334	0.820	0.610
320	0.480	0.160
310	0.120	0.000
300	0.000	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	34/31

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2903
$P_{C,s}$	0.5454
$P_{d,C}$	0.3052
$P_{e,d}$	0.2385
$P_{g,F}$	0.5414
$P_{i,h}$	0.7652

Relative Partial Dispersion P'

$P'_{s,t}$	0.2880
$P'_{C',s}$	0.5894
$P'_{d,C'}$	0.2545
$P'_{e,d}$	0.2366
$P'_{g,F'}$	0.4807
$P'_{i,h}$	0.7590

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0085
$\Delta P_{C,s}$	0.0038
$\Delta P_{F,e}$	-0.0008
$\Delta P_{g,F}$	-0.0024
$\Delta P_{i,g}$	-0.0113

Chemical Properties

CR	4
FR	3
SR	52.3
AR	2
PR	3
SR-J	4
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.9
T_g [°C]	493
$T_{10^{13}}$ [°C]	494
$T_{10^{7.6}}$ [°C]	593
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	1.010
AT [°C]	522
ρ [g/cm^3]	3.01
E [10^3 N/mm^2]	93
µ	0.249
K [10^{-6} mm^2/N]	2.17
$HK_{0.1/20}$	535
HG	3
Abrasion Aa	124

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.0	0.0	0.0	0.0	0.0	0.0
+20/+40	0.0	0.0	0.0	0.0	0.0	0.0
+60/+80	0.0	0.0	0.0	0.0	0.0	0.0

Datasheet

P-SK58A
589612.297

n_d = 1.58913	ν_d = 61.15	$n_F - n_C$ = 0.009634
n_e = 1.59143	ν_e = 60.93	$n_{F'} - n_{C'}$ = 0.009707

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.55820
$n_{1970.1}$	1970.1	1.56439
$n_{1529.6}$	1529.6	1.57086
$n_{1060.0}$	1060.0	1.57728
n_t	1014.0	1.57799
n_s	852.1	1.58086
n_r	706.5	1.58449
n_C	656.3	1.58618
$n_{C'}$	643.8	1.58665
$n_{632.8}$	632.8	1.58709
n_D	589.3	1.58904
n_d	587.6	1.58913
n_e	546.1	1.59143
n_F	486.1	1.59581
$n_{F'}$	480.0	1.59636
n_g	435.8	1.60100
n_h	404.7	1.60530
n_i	365.0	1.61260
$n_{334.1}$	334.1	1.62045
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.316784100
B_2	0.171154756
B_3	1.125014730
C_1	0.007207175
C_2	0.0245659595
C_3	102.73972800

Constants of Formula for dn/dT

D_0	3.16E-06
D_1	1.23E-08
D_2	-1.08E-11
E_0	4.41E-07
E_1	3.20E-10
λ_{TK} [µm]	0.176

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.550	0.220
2325	0.750	0.480
1970	0.920	0.820
1530	0.984	0.961
1060	0.996	0.991
700	0.995	0.988
660	0.995	0.988
620	0.996	0.989
580	0.997	0.992
546	0.998	0.994
500	0.997	0.993
460	0.996	0.989
436	0.995	0.987
420	0.994	0.986
405	0.994	0.985
400	0.994	0.984
390	0.991	0.977
380	0.986	0.965
370	0.980	0.950
365	0.971	0.930
350	0.920	0.820
334	0.750	0.490
320	0.360	0.080
310	0.070	0.000
300	0.000	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	35/31

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2982
$P_{C,s}$	0.5519
$P_{d,C}$	0.3062
$P_{e,d}$	0.2386
$P_{g,F}$	0.5386
$P_{i,h}$	0.7578

Relative Partial Dispersion P'

$P'_{s,t}$	0.2959
$P'_{C',s}$	0.5963
$P'_{d,C'}$	0.2554
$P'_{e,d}$	0.2368
$P'_{g,F'}$	0.4784
$P'_{i,h}$	0.7521

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0150
$\Delta P_{C,s}$	0.0065
$\Delta P_{F,e}$	-0.0010
$\Delta P_{g,F}$	-0.0023
$\Delta P_{i,g}$	-0.0080

Chemical Properties

CR	
FR	
SR	
AR	
PR	
SR-J	4
WR-J	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	510
$T_{10^{13}}$ [°C]	510
$T_{10^{7.6}}$ [°C]	608
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.020
AT [°C]	551
ρ [g/cm³]	2.97
E [10^3 N/mm²]	97
µ	0.245
K [10^{-6} mm²/N]	2.12
$HK_{0.1/20}$	662
Abrasion Aa	102

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.2	3.8	4.4	1.0	1.6	2.2
+20/+40	3.2	3.8	4.4	1.8	2.4	3.0
+60/+80	3.3	4.0	4.7	2.2	2.9	3.6

Datasheet

SCHOTT
glass made of ideas

P-SK60
610579.308

n_d = 1.61035	ν_d = 57.90	$n_F - n_C$ = 0.010541
n_e = 1.61286	ν_e = 57.66	$n_{F'} - n_{C'}$ = 0.010628

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57831
$n_{1970.1}$	1970.1	1.58450
$n_{1529.6}$	1529.6	1.59102
$n_{1060.0}$	1060.0	1.59762
n_t	1014.0	1.59836
n_s	852.1	1.60140
n_r	706.5	1.60530
n_C	656.3	1.60714
$n_{C'}$	643.8	1.60765
$n_{632.8}$	632.8	1.60813
n_D	589.3	1.61026
n_d	587.6	1.61035
n_e	546.1	1.61286
n_F	486.1	1.61768
$n_{F'}$	480.0	1.61828
n_g	435.8	1.62340
n_h	404.7	1.62815
n_i	365.0	1.63627
$n_{334.1}$	334.1	1.64506
$n_{312.6}$	312.6	1.65317
$n_{296.7}$	296.7	1.66061
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.407904420
B_2	0.143381417
B_3	1.165139470
C_1	0.007843824
C_2	0.0287769365
C_3	105.37339700

Constants of Formula for dn/dT

D_0	2.41E-06
D_1	9.52E-09
D_2	-8.08E-12
E_0	4.72E-07
E_1	6.22E-10
λ_{TK} [µm]	0.193

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.690	0.400
2325	0.830	0.630
1970	0.959	0.900
1530	0.993	0.983
1060	0.999	0.998
700	0.999	0.997
660	0.998	0.996
620	0.998	0.996
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.995
436	0.998	0.994
420	0.998	0.994
405	0.997	0.993
400	0.997	0.992
390	0.995	0.988
380	0.993	0.983
370	0.990	0.974
365	0.987	0.967
350	0.967	0.920
334	0.910	0.780
320	0.750	0.480
310	0.480	0.160
300	0.150	0.010
290	0.010	0.000
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	33/29

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2887
$P_{C,s}$	0.5438
$P_{d,C}$	0.3049
$P_{e,d}$	0.2384
$P_{g,F}$	0.5427
$P_{i,h}$	0.7702

Relative Partial Dispersion P'

$P'_{s,t}$	0.2863
$P'_{C',s}$	0.5876
$P'_{d,C'}$	0.2542
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4819
$P'_{i,h}$	0.7639

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0128
$\Delta P_{C,s}$	0.0059
$\Delta P_{F,e}$	-0.0012
$\Delta P_{g,F}$	-0.0037
$\Delta P_{i,g}$	-0.0177

Chemical Properties

CR	3
FR	5
SR	53.4
AR	2.3
PR	3.3
SR-J	4
WR-J	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.9
T_g [°C]	507
$T_{10^{13}}$ [°C]	509
$T_{10^{7.6}}$ [°C]	606
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	1.130
AT [°C]	547
ρ [g/cm³]	3.08
E [10^3 N/mm²]	99
µ	0.253
K [10^{-6} mm²/N]	2.04
$HK_{0.1/20}$	601
Abrasion Aa	86

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.0	3.7	4.3	0.9	1.5	2.1
+20/+40	2.9	3.6	4.3	1.5	2.3	2.9
+60/+80	2.9	3.8	4.5	1.8	2.7	3.4

Datasheet

SCHOTT
glass made of ideas

N-KF9
523515.250

n_d = 1.52346 ν_d = 51.54 $n_F - n_C$ = 0.010156
n_e = 1.52588 ν_e = 51.26 $n_{F'} - n_{C'}$ = 0.010258

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.49608
$n_{1970.1}$	1970.1	1.50095
$n_{1529.6}$	1529.6	1.50616
$n_{1060.0}$	1060.0	1.51170
n_t	1014.0	1.51234
n_s	852.1	1.51507
n_r	706.5	1.51867
n_C	656.3	1.52040
$n_{C'}$	643.8	1.52089
$n_{632.8}$	632.8	1.52134
n_D	589.3	1.52337
n_d	587.6	1.52346
n_e	546.1	1.52588
n_F	486.1	1.53056
$n_{F'}$	480.0	1.53114
n_g	435.8	1.53620
n_h	404.7	1.54096
n_i	365.0	1.54925
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.192867780
B_2	0.089334657
B_3	0.920819805
C_1	0.008391547
C_2	0.0404010786
C_3	112.57244600

Constants of Formula for dn/dT

D_0	-1.66E-06
D_1	8.44E-09
D_2	-1.01E-11
E_0	6.10E-07
E_1	6.96E-10
λ_{TK} [µm]	0.217

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.620	0.300
2325	0.710	0.430
1970	0.890	0.740
1530	0.992	0.981
1060	0.998	0.995
700	0.999	0.997
660	0.998	0.995
620	0.998	0.994
580	0.998	0.996
546	0.998	0.996
500	0.998	0.994
460	0.996	0.990
436	0.995	0.988
420	0.994	0.985
405	0.990	0.975
400	0.986	0.965
390	0.976	0.940
380	0.950	0.880
370	0.900	0.770
365	0.860	0.680
350	0.540	0.210
334	0.030	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/34

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2683
$P_{C,s}$	0.5249
$P_{d,C}$	0.3012
$P_{e,d}$	0.2380
$P_{g,F}$	0.5558
$P_{i,h}$	0.8161

Relative Partial Dispersion P'

$P'_{s,t}$	0.2657
$P'_{C',s}$	0.5669
$P'_{d,C'}$	0.2509
$P'_{e,d}$	0.2356
$P'_{g,F'}$	0.4930
$P'_{i,h}$	0.8080

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0038
$\Delta P_{C,s}$	0.0018
$\Delta P_{F,e}$	-0.0004
$\Delta P_{g,F}$	-0.0014
$\Delta P_{i,g}$	-0.0075

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	11.0
T_g [°C]	476
$T_{10^{13}}$ [°C]	476
$T_{10^{7.6}}$ [°C]	640
c_p [J/(g*K)]	0.860
λ [W/(m•K)]	1.040
ρ [g/cm³]	2.50
E [10^3 N/mm²]	66
µ	0.225
K [10^{-6} mm²/N]	2.74
$HK_{0.1/20}$	480
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.1	1.9	2.6	-0.9	-0.2	0.5
+20/+40	0.9	1.8	2.6	-0.4	0.4	1.3
+60/+80	0.9	1.8	2.8	-0.1	0.8	1.7

Datasheet

SCHOTT
glass made of ideas

N-SSK2
622533.353

n_d = 1.62229	ν_d = 53.27	$n_F - n_C$ = 0.011681
n_e = 1.62508	ν_e = 52.99	$n_{F'} - n_{C'}$ = 0.011795

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.59149
$n_{1970.1}$	1970.1	1.59685
$n_{1529.6}$	1529.6	1.60260
$n_{1060.0}$	1060.0	1.60880
n_t	1014.0	1.60953
n_s	852.1	1.61264
n_r	706.5	1.61678
n_C	656.3	1.61877
$n_{C'}$	643.8	1.61933
$n_{632.8}$	632.8	1.61985
n_D	589.3	1.62219
n_d	587.6	1.62229
n_e	546.1	1.62508
n_F	486.1	1.63045
$n_{F'}$	480.0	1.63112
n_g	435.8	1.63691
n_h	404.7	1.64232
n_i	365.0	1.65166
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.430602700
B_2	0.153150554
B_3	1.013909040
C_1	0.008239830
C_2	0.0333736841
C_3	106.87082200

Constants of Formula for dn/dT

D_0	5.21E-06
D_1	1.34E-08
D_2	-1.01E-11
E_0	5.21E-07
E_1	5.87E-10
λ_{TK} [µm]	0.199

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.500
2325	0.880	0.720
1970	0.971	0.930
1530	0.992	0.981
1060	0.997	0.992
700	0.998	0.996
660	0.998	0.994
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.994	0.985
436	0.992	0.980
420	0.990	0.975
405	0.985	0.963
400	0.981	0.954
390	0.967	0.920
380	0.940	0.860
370	0.890	0.750
365	0.850	0.670
350	0.570	0.250
334	0.080	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/33

Remarks

i-line glass

Relative Partial Dispersion P

$P_{s,t}$	0.2661
$P_{C,s}$	0.5246
$P_{d,C}$	0.3016
$P_{e,d}$	0.2381
$P_{g,F}$	0.5526
$P_{i,h}$	0.7997

Relative Partial Dispersion P'

$P'_{s,t}$	0.2636
$P'_{C',s}$	0.5669
$P'_{d,C'}$	0.2513
$P'_{e,d}$	0.2358
$P'_{g,F'}$	0.4902
$P'_{i,h}$	0.7920

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0069
$\Delta P_{C,s}$	-0.0025
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0016
$\Delta P_{i,g}$	-0.0146

Chemical Properties

CR	1
FR	0
SR	1.2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.7
T_g [°C]	653
$T_{10^{13}}$ [°C]	655
$T_{10^{7.6}}$ [°C]	801
c_p [J/(g*K)]	0.580
λ [W/(m•K)]	0.810
ρ [g/cm³]	3.53
E [10^3 N/mm²]	82
µ	0.261
K [10^{-6} mm²/N]	2.51
$HK_{0.1/20}$	570
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.2	5.0	5.8	2.1	2.8	3.5
+20/+40	4.3	5.2	6.1	2.9	3.8	4.6
+60/+80	4.5	5.5	6.4	3.5	4.4	5.3

Datasheet

SCHOTT
glass made of ideas

N-SSK5
658509.371

n_d = 1.65844	ν_d = 50.88	$n_F - n_C$ = 0.012940
n_e = 1.66152	ν_e = 50.59	$n_{F'} - n_{C'}$ = 0.013075

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.62581
$n_{1970.1}$	1970.1	1.63128
$n_{1529.6}$	1529.6	1.63720
$n_{1060.0}$	1060.0	1.64371
n_t	1014.0	1.64450
n_s	852.1	1.64785
n_r	706.5	1.65237
n_C	656.3	1.65455
$n_{C'}$	643.8	1.65517
$n_{632.8}$	632.8	1.65574
n_D	589.3	1.65833
n_d	587.6	1.65844
n_e	546.1	1.66152
n_F	486.1	1.66749
$n_{F'}$	480.0	1.66824
n_g	435.8	1.67471
n_h	404.7	1.68079
n_i	365.0	1.69139
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.592226590
B_2	0.103520774
B_3	1.051740160
C_1	0.009202846
C_2	0.0423530072
C_3	106.92737400

Constants of Formula for dn/dT

D_0	7.29E-07
D_1	1.17E-08
D_2	-1.50E-11
E_0	6.08E-07
E_1	7.66E-10
λ_{TK} [µm]	0.189

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.450
2325	0.850	0.660
1970	0.963	0.910
1530	0.992	0.980
1060	0.996	0.990
700	0.997	0.993
660	0.997	0.992
620	0.997	0.992
580	0.997	0.993
546	0.996	0.990
500	0.993	0.982
460	0.987	0.968
436	0.982	0.956
420	0.976	0.940
405	0.963	0.910
400	0.959	0.900
390	0.940	0.860
380	0.900	0.760
370	0.800	0.580
365	0.730	0.450
350	0.340	0.060
334	0.020	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	38/34

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2592
$P_{C,s}$	0.5181
$P_{d,C}$	0.3003
$P_{e,d}$	0.2380
$P_{g,F}$	0.5575
$P_{i,h}$	0.8192

Relative Partial Dispersion P'

$P'_{s,t}$	0.2566
$P'_{C',s}$	0.5598
$P'_{d,C'}$	0.2502
$P'_{e,d}$	0.2355
$P'_{g,F'}$	0.4944
$P'_{i,h}$	0.8108

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0090
$\Delta P_{C,s}$	-0.0034
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	-0.0007
$\Delta P_{i,g}$	-0.0081

Chemical Properties

CR	2
FR	3
SR	52.2
AR	2.2
PR	3.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.0
T_g [°C]	645
$T_{10^{13}}$ [°C]	637
$T_{10^{7.6}}$ [°C]	751
c_p [J/(g*K)]	0.574
λ [W/(m•K)]	
ρ [g/cm³]	3.71
E [10^3 N/mm²]	88
µ	0.278
K [10^{-6} mm²/N]	1.90
$HK_{0.1/20}$	590
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.2	3.0	3.9	0.0	0.8	1.6
+20/+40	2.2	3.2	4.2	0.8	1.8	2.7
+60/+80	2.4	3.5	4.5	1.2	2.3	3.4

Datasheet

SCHOTT
glass made of ideas

N-SSK8
618498.327

n_d = 1.61773	ν_d = 49.83	$n_F - n_C$ = 0.012397
n_e = 1.62068	ν_e = 49.54	$n_{F'} - n_{C'}$ = 0.012529

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58594
$n_{1970.1}$	1970.1	1.59137
$n_{1529.6}$	1529.6	1.59723
$n_{1060.0}$	1060.0	1.60360
n_t	1014.0	1.60436
n_s	852.1	1.60759
n_r	706.5	1.61192
n_C	656.3	1.61401
$n_{C'}$	643.8	1.61460
$n_{632.8}$	632.8	1.61515
n_D	589.3	1.61762
n_d	587.6	1.61773
n_e	546.1	1.62068
n_F	486.1	1.62641
$n_{F'}$	480.0	1.62713
n_g	435.8	1.63335
n_h	404.7	1.63923
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.448578670
B_2	0.117965926
B_3	1.069375280
C_1	0.008693101
C_2	0.0421566593
C_3	111.30066600

Constants of Formula for dn/dT

D_0	5.34E-07
D_1	1.27E-08
D_2	-1.75E-11
E_0	5.40E-07
E_1	7.05E-10
λ_{TK} [µm]	0.224

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.460
2325	0.850	0.660
1970	0.959	0.900
1530	0.992	0.980
1060	0.997	0.993
700	0.998	0.994
660	0.996	0.991
620	0.996	0.990
580	0.997	0.992
546	0.997	0.992
500	0.994	0.984
460	0.987	0.969
436	0.982	0.955
420	0.975	0.940
405	0.959	0.900
400	0.950	0.880
390	0.920	0.810
380	0.850	0.660
370	0.730	0.450
365	0.630	0.310
350	0.190	0.010
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2606
$P_{C,s}$	0.5179
$P_{d,C}$	0.2999
$P_{e,d}$	0.2378
$P_{g,F}$	0.5602
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2579
$P'_{C',s}$	0.5594
$P'_{d,C'}$	0.2498
$P'_{e,d}$	0.2353
$P'_{g,F'}$	0.4967
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0028
$\Delta P_{C,s}$	-0.0012
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0002
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.3
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	616
$T_{10^{13}}$ [°C]	604
$T_{10^{7.6}}$ [°C]	742
c_p [J/(g*K)]	0.640
λ [W/(m•K)]	0.840
ρ [g/cm³]	3.27
E [10^3 N/mm²]	84
µ	0.251
K [10^{-6} mm²/N]	2.36
$HK_{0.1/20}$	570
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.9	2.7	3.5	-0.2	0.5	1.3
+20/+40	2.0	2.9	3.9	0.6	1.5	2.4
+60/+80	2.2	3.2	4.2	1.1	2.1	3.1

Datasheet

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N-LAK7
652585.384

n_d = 1.65160	ν_d = 58.52	$n_F - n_C$ = 0.011135
n_e = 1.65425	ν_e = 58.26	$n_{F'} - n_{C'}$ = 0.011229

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.61875
$n_{1970.1}$	1970.1	1.62499
$n_{1529.6}$	1529.6	1.63156
$n_{1060.0}$	1060.0	1.63828
n_t	1014.0	1.63904
n_s	852.1	1.64220
n_r	706.5	1.64628
n_C	656.3	1.64821
$n_{C'}$	643.8	1.64875
$n_{632.8}$	632.8	1.64925
n_D	589.3	1.65150
n_d	587.6	1.65160
n_e	546.1	1.65425
n_F	486.1	1.65934
$n_{F'}$	480.0	1.65998
n_g	435.8	1.66539
n_h	404.7	1.67042
n_i	365.0	1.67897
$n_{334.1}$	334.1	1.68820
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.236798890
B_2	0.445051837
B_3	1.017458880
C_1	0.006101055
C_2	0.0201388334
C_3	90.63803800

Constants of Formula for dn/dT

D_0	-3.40E-06
D_1	1.17E-08
D_2	2.38E-11
E_0	4.96E-07
E_1	4.44E-10
λ_{TK} [µm]	0.107

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.550	0.220
2325	0.750	0.490
1970	0.940	0.860
1530	0.989	0.972
1060	0.999	0.998
700	0.999	0.997
660	0.998	0.996
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.994	0.984
436	0.992	0.980
420	0.991	0.977
405	0.989	0.973
400	0.988	0.970
390	0.984	0.961
380	0.978	0.950
370	0.966	0.920
365	0.956	0.890
350	0.910	0.790
334	0.800	0.570
320	0.620	0.300
310	0.420	0.110
300	0.190	0.020
290	0.050	0.000
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	35/29

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2835
$P_{C,s}$	0.5400
$P_{d,C}$	0.3044
$P_{e,d}$	0.2385
$P_{g,F}$	0.5433
$P_{i,h}$	0.7687

Relative Partial Dispersion P'

$P'_{s,t}$	0.2812
$P'_{C',s}$	0.5836
$P'_{d,C'}$	0.2538
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4823
$P'_{i,h}$	0.7622

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0010
$\Delta P_{C,s}$	0.0007
$\Delta P_{F,e}$	-0.0005
$\Delta P_{g,F}$	-0.0021
$\Delta P_{i,g}$	-0.0140

Chemical Properties

CR	3
FR	2
SR	53.3
AR	3.3
PR	4.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	618
$T_{10^{13}}$ [°C]	626
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.530
λ [W/(m•K)]	0.740
ρ [g/cm³]	3.84
E [10^3 N/mm²]	90
µ	0.277
K [10^{-6} mm²/N]	1.65
$HK_{0.1/20}$	600
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.2	0.8	1.3	-2.0	-1.5	-1.0
+20/+40	0.0	0.7	1.3	-1.4	-0.7	-0.2
+60/+80	0.3	1.0	1.7	-0.8	-0.1	0.5

Datasheet

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N-LAK8
713538.375

n_d = 1.71300	ν_d = 53.83	$n_F - n_C$ = 0.013245
n_e = 1.71616	ν_e = 53.61	$n_{F'} - n_{C'}$ = 0.013359

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67294
$n_{1970.1}$	1970.1	1.68075
$n_{1529.6}$	1529.6	1.68890
$n_{1060.0}$	1060.0	1.69710
n_t	1014.0	1.69802
n_s	852.1	1.70181
n_r	706.5	1.70668
n_C	656.3	1.70897
$n_{C'}$	643.8	1.70962
$n_{632.8}$	632.8	1.71022
n_D	589.3	1.71289
n_d	587.6	1.71300
n_e	546.1	1.71616
n_F	486.1	1.72222
$n_{F'}$	480.0	1.72297
n_g	435.8	1.72944
n_h	404.7	1.73545
n_i	365.0	1.74573
$n_{334.1}$	334.1	1.75687
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.331831670
B_2	0.546623206
B_3	1.190840150
C_1	0.006200239
C_2	0.0216465439
C_3	82.58277360

Constants of Formula for dn/dT

D_0	4.10E-06
D_1	1.25E-08
D_2	-1.60E-11
E_0	4.30E-07
E_1	6.29E-10
λ_{TK} [µm]	0.213

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.400	0.100
2325	0.710	0.420
1970	0.950	0.880
1530	0.992	0.979
1060	0.998	0.994
700	0.998	0.996
660	0.998	0.995
620	0.998	0.994
580	0.998	0.994
546	0.998	0.995
500	0.998	0.994
460	0.995	0.987
436	0.992	0.979
420	0.988	0.970
405	0.981	0.952
400	0.977	0.940
390	0.965	0.920
380	0.950	0.870
370	0.910	0.780
365	0.880	0.720
350	0.740	0.470
334	0.510	0.190
320	0.280	0.040
310	0.140	0.010
300	0.040	
290	0.010	
280		
270		
260		
250		

Color Code

λ80 / λ5	37/30

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2861
$P_{C,s}$	0.5408
$P_{d,C}$	0.3042
$P_{e,d}$	0.2383
$P_{g,F}$	0.5450
$P_{i,h}$	0.7764

Relative Partial Dispersion P'

$P'_{s,t}$	0.2836
$P'_{C',s}$	0.5843
$P'_{d,C'}$	0.2536
$P'_{e,d}$	0.2363
$P'_{g,F'}$	0.4838
$P'_{i,h}$	0.7698

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0266
$\Delta P_{C,s}$	0.0124
$\Delta P_{F,e}$	-0.0026
$\Delta P_{g,F}$	-0.0083
$\Delta P_{i,g}$	-0.0428

Chemical Properties

CR	3
FR	2
SR	52.3
AR	1
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.7
T_g [°C]	643
$T_{10^{13}}$ [°C]	635
$T_{10^{7.6}}$ [°C]	717
c_p [J/(g*K)]	0.620
λ [W/(m•K)]	0.840
ρ [g/cm³]	3.75
E [10^3 N/mm²]	115
µ	0.289
K [10^{-6} mm²/N]	1.81
$HK_{0.1/20}$	740
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.0	4.7	5.4	1.7	2.4	3.0
+20/+40	4.1	5.0	5.8	2.6	3.5	4.3
+60/+80	4.3	5.2	6.2	3.1	4.1	5.0

Datasheet

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N-LAK9
691547.351

n_d = 1.69100	ν_d = 54.71	$n_F - n_C$ = 0.012631
n_e = 1.69401	ν_e = 54.48	$n_{F'} - n_{C'}$ = 0.012738

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.65294
$n_{1970.1}$	1970.1	1.66032
$n_{1529.6}$	1529.6	1.66804
$n_{1060.0}$	1060.0	1.67584
n_t	1014.0	1.67672
n_s	852.1	1.68033
n_r	706.5	1.68497
n_C	656.3	1.68716
$n_{C'}$	643.8	1.68777
$n_{632.8}$	632.8	1.68834
n_D	589.3	1.69089
n_d	587.6	1.69100
n_e	546.1	1.69401
n_F	486.1	1.69979
$n_{F'}$	480.0	1.70051
n_g	435.8	1.70667
n_h	404.7	1.71239
n_i	365.0	1.72219
$n_{334.1}$	334.1	1.73281
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.462319050
B_2	0.344399589
B_3	1.155083720
C_1	0.007242702
C_2	0.0243353131
C_3	85.46868680

Constants of Formula for dn/dT

D_0	2.11E-06
D_1	1.11E-08
D_2	1.82E-12
E_0	4.74E-07
E_1	-3.47E-10
λ_{TK} [µm]	0.146

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.460	0.140
2325	0.710	0.420
1970	0.940	0.860
1530	0.986	0.966
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.994
546	0.998	0.994
500	0.997	0.992
460	0.994	0.984
436	0.991	0.977
420	0.988	0.970
405	0.983	0.957
400	0.980	0.950
390	0.971	0.930
380	0.954	0.890
370	0.930	0.830
365	0.910	0.780
350	0.790	0.550
334	0.530	0.200
320	0.210	0.020
310	0.070	0.000
300	0.010	
290	0.000	
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	37/31

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2859
$P_{C,s}$	0.5409
$P_{d,C}$	0.3043
$P_{e,d}$	0.2384
$P_{g,F}$	0.5447
$P_{i,h}$	0.7756

Relative Partial Dispersion P'

$P'_{s,t}$	0.2834
$P'_{C',s}$	0.5844
$P'_{d,C'}$	0.2536
$P'_{e,d}$	0.2363
$P'_{g,F'}$	0.4835
$P'_{i,h}$	0.7690

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0223
$\Delta P_{C,s}$	0.0105
$\Delta P_{F,e}$	-0.0023
$\Delta P_{g,F}$	-0.0071
$\Delta P_{i,g}$	-0.0367

Chemical Properties

CR	3
FR	3
SR	52
AR	1.2
PR	4.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.5
T_g [°C]	656
$T_{10^{13}}$ [°C]	645
$T_{10^{7.6}}$ [°C]	722
c_p [J/(g*K)]	0.649
λ [W/(m•K)]	0.908
ρ [g/cm³]	3.51
E [10^3 N/mm²]	110
µ	0.285
K [10^{-6} mm²/N]	1.83
$HK_{0.1/20}$	700
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.0	3.9	4.6	0.8	1.6	2.3
+20/+40	2.9	3.7	4.4	1.5	2.2	2.9
+60/+80	3.1	3.8	4.4	2.0	2.7	3.3

Datasheet

N-LAK10
720506.369

n_d = 1.72003	ν_d = 50.62	$n_F - n_C$ = 0.014224
n_e = 1.72341	ν_e = 50.39	$n_{F'} - n_{C'}$ = 0.014357

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67890
$n_{1970.1}$	1970.1	1.68670
$n_{1529.6}$	1529.6	1.69488
$n_{1060.0}$	1060.0	1.70324
n_t	1014.0	1.70419
n_s	852.1	1.70815
n_r	706.5	1.71328
n_C	656.3	1.71572
$n_{C'}$	643.8	1.71641
$n_{632.8}$	632.8	1.71705
n_D	589.3	1.71990
n_d	587.6	1.72003
n_e	546.1	1.72341
n_F	486.1	1.72995
$n_{F'}$	480.0	1.73077
n_g	435.8	1.73779
n_h	404.7	1.74438
n_i	365.0	1.75578
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.728780170
B_2	0.169257825
B_3	1.193869560
C_1	0.008860146
C_2	0.0363416509
C_3	82.90090690

Constants of Formula for dn/dT

D_0	4.10E-06
D_1	1.23E-08
D_2	-7.85E-12
E_0	5.08E-07
E_1	5.76E-10
λ_{TK} [µm]	0.205

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.430	0.120
2325	0.720	0.440
1970	0.950	0.880
1530	0.991	0.977
1060	0.998	0.995
700	0.998	0.995
660	0.998	0.994
620	0.998	0.994
580	0.997	0.993
546	0.998	0.994
500	0.995	0.988
460	0.991	0.977
436	0.988	0.970
420	0.980	0.951
405	0.970	0.930
400	0.964	0.910
390	0.950	0.880
380	0.920	0.810
370	0.860	0.690
365	0.800	0.580
350	0.500	0.180
334	0.060	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	38/33

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2779
$P_{C,s}$	0.5328
$P_{d,C}$	0.3025
$P_{e,d}$	0.2381
$P_{g,F}$	0.5515
$P_{i,h}$	0.8015

Relative Partial Dispersion P'

$P'_{s,t}$	0.2753
$P'_{C',s}$	0.5755
$P'_{d,C'}$	0.2521
$P'_{e,d}$	0.2359
$P'_{g,F'}$	0.4894
$P'_{i,h}$	0.7941

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0256
$\Delta P_{C,s}$	0.0119
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0072
$\Delta P_{i,g}$	-0.0354

Chemical Properties

CR	2
FR	2
SR	52.3
AR	1
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.8
T_g [°C]	636
$T_{10^{13}}$ [°C]	631
$T_{10^{7.6}}$ [°C]	714
c_p [J/(g*K)]	0.640
λ [W/(m•K)]	0.860
ρ [g/cm³]	3.69
E [10^3 N/mm²]	116
µ	0.286
K [10^{-6} mm²/N]	1.97
$HK_{0.1/20}$	780
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.1	5.0	5.8	1.8	2.6	3.4
+20/+40	4.2	5.1	6.1	2.7	3.6	4.6
+60/+80	4.4	5.4	6.5	3.2	4.3	5.3

Datasheet

SCHOTT
glass made of ideas

N-LAK12
678552.410

n_d = 1.67790	ν_d = 55.20	$n_F - n_C$ = 0.012281
n_e = 1.68083	ν_e = 54.92	$n_{F'} - n_{C'}$ = 0.012396

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.64541
$n_{1970.1}$	1970.1	1.65107
$n_{1529.6}$	1529.6	1.65713
$n_{1060.0}$	1060.0	1.66366
n_t	1014.0	1.66443
n_s	852.1	1.66772
n_r	706.5	1.67209
n_C	656.3	1.67419
$n_{C'}$	643.8	1.67478
$n_{632.8}$	632.8	1.67533
n_D	589.3	1.67779
n_d	587.6	1.67790
n_e	546.1	1.68083
n_F	486.1	1.68647
$n_{F'}$	480.0	1.68717
n_g	435.8	1.69320
n_h	404.7	1.69882
n_i	365.0	1.70842
$n_{334.1}$	334.1	1.71881
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.173657040
B_2	0.588992398
B_3	0.978014394
C_1	0.005770318
C_2	0.0200401678
C_3	95.48734820

Constants of Formula for dn/dT

D_0	-5.67E-06
D_1	8.27E-09
D_2	1.27E-12
E_0	5.25E-07
E_1	6.30E-10
λ_{TK} [µm]	0.162

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.590	0.270
2325	0.760	0.510
1970	0.940	0.850
1530	0.990	0.975
1060	0.997	0.992
700	0.997	0.993
660	0.996	0.989
620	0.995	0.988
580	0.996	0.990
546	0.996	0.991
500	0.994	0.986
460	0.987	0.968
436	0.983	0.958
420	0.981	0.952
405	0.977	0.940
400	0.976	0.940
390	0.967	0.920
380	0.950	0.870
370	0.910	0.790
365	0.880	0.730
350	0.730	0.460
334	0.470	0.150
320	0.150	0.010
310	0.030	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/31

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2673
$P_{C,s}$	0.5269
$P_{d,C}$	0.3024
$P_{e,d}$	0.2383
$P_{g,F}$	0.5485
$P_{i,h}$	0.7818

Relative Partial Dispersion P'

$P'_{s,t}$	0.2648
$P'_{C',s}$	0.5695
$P'_{d,C'}$	0.2521
$P'_{e,d}$	0.2361
$P'_{g,F'}$	0.4866
$P'_{i,h}$	0.7746

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0126
$\Delta P_{C,s}$	-0.0047
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0024
$\Delta P_{i,g}$	-0.0226

Chemical Properties

CR	3
FR	1
SR	53.3
AR	3.3
PR	4.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.3
T_g [°C]	614
$T_{10^{13}}$ [°C]	606
$T_{10^{7.6}}$ [°C]	714
c_p [J/(g*K)]	0.510
λ [W/(m•K)]	0.680
ρ [g/cm³]	4.10
E [10^3 N/mm²]	87
µ	0.288
K [10^{-6} mm²/N]	1.44
$HK_{0.1/20}$	560
HG	6

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-1.0	-0.3	0.3	-3.2	-2.6	-2.0
+20/+40	-1.2	-0.4	0.3	-2.7	-1.9	-1.2
+60/+80	-1.2	-0.3	0.5	-2.3	-1.5	-0.7

Datasheet

SCHOTT
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N-LAK14
697554.363

n_d = 1.69680	ν_d = 55.41	$n_F - n_C$ = 0.012575
n_e = 1.69980	ν_e = 55.19	$n_{F'} - n_{C'}$ = 0.012679

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.65783
$n_{1970.1}$	1970.1	1.66554
$n_{1529.6}$	1529.6	1.67357
$n_{1060.0}$	1060.0	1.68157
n_t	1014.0	1.68246
n_s	852.1	1.68612
n_r	706.5	1.69077
n_C	656.3	1.69297
$n_{C'}$	643.8	1.69358
$n_{632.8}$	632.8	1.69415
n_D	589.3	1.69669
n_d	587.6	1.69680
n_e	546.1	1.69980
n_F	486.1	1.70554
$n_{F'}$	480.0	1.70626
n_g	435.8	1.71237
n_h	404.7	1.71804
n_i	365.0	1.72772
$n_{334.1}$	334.1	1.73819
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.507812120
B_2	0.318866829
B_3	1.142872130
C_1	0.007460987
C_2	0.0242024834
C_3	80.95651650

Constants of Formula for dn/dT

D_0	2.68E-06
D_1	1.15E-08
D_2	-1.44E-11
E_0	3.72E-07
E_1	5.53E-10
λ_{TK} [µm]	0.226

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.380	0.090
2325	0.670	0.370
1970	0.930	0.840
1530	0.984	0.960
1060	0.998	0.995
700	0.998	0.995
660	0.998	0.994
620	0.997	0.992
580	0.997	0.993
546	0.998	0.995
500	0.997	0.992
460	0.994	0.984
436	0.991	0.977
420	0.988	0.971
405	0.984	0.960
400	0.981	0.953
390	0.971	0.930
380	0.959	0.900
370	0.930	0.840
365	0.910	0.800
350	0.820	0.610
334	0.640	0.330
320	0.430	0.120
310	0.240	0.040
300	0.090	0.000
290	0.020	
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	36/27

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2903
$P_{C,s}$	0.5447
$P_{d,C}$	0.3049
$P_{e,d}$	0.2384
$P_{g,F}$	0.5427
$P_{i,h}$	0.7701

Relative Partial Dispersion P'

$P'_{s,t}$	0.2880
$P'_{C',s}$	0.5885
$P'_{d,C'}$	0.2542
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4819
$P'_{i,h}$	0.7638

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0273
$\Delta P_{C,s}$	0.0127
$\Delta P_{F,e}$	-0.0026
$\Delta P_{g,F}$	-0.0079
$\Delta P_{i,g}$	-0.0386

Chemical Properties

CR	3
FR	2
SR	52.3
AR	1
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.9
T_g [°C]	661
$T_{10^{13}}$ [°C]	653
$T_{10^{7.6}}$ [°C]	734
c_p [J/(g*K)]	0.630
λ [W/(m•K)]	0.890
ρ [g/cm³]	3.63
E [10^3 N/mm²]	111
µ	0.283
K [10^{-6} mm²/N]	1.73
$HK_{0.1/20}$	730
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.2	3.8	4.4	0.9	1.5	2.1
+20/+40	3.2	4.0	4.7	1.8	2.5	3.2
+60/+80	3.4	4.2	5.0	2.2	3.0	3.8

Datasheet

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N-LAK21
640601.374

n_d = 1.64049	ν_d = 60.10	$n_F - n_C$ = 0.010657
n_e = 1.64304	ν_e = 59.86	$n_{F'} - n_{C'}$ = 0.010743

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.60776
$n_{1970.1}$	1970.1	1.61416
$n_{1529.6}$	1529.6	1.62086
$n_{1060.0}$	1060.0	1.62759
n_t	1014.0	1.62834
n_s	852.1	1.63143
n_r	706.5	1.63538
n_C	656.3	1.63724
$n_{C'}$	643.8	1.63776
$n_{632.8}$	632.8	1.63825
n_D	589.3	1.64040
n_d	587.6	1.64049
n_e	546.1	1.64304
n_F	486.1	1.64790
$n_{F'}$	480.0	1.64850
n_g	435.8	1.65366
n_h	404.7	1.65844
n_i	365.0	1.66657
$n_{334.1}$	334.1	1.67532
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.227181160
B_2	0.420783743
B_3	1.012848430
C_1	0.006020757
C_2	0.0196862889
C_3	88.43700990

Constants of Formula for dn/dT

D_0	-2.36E-06
D_1	1.15E-08
D_2	1.11E-11
E_0	3.10E-07
E_1	2.78E-10
λ_{TK} [µm]	0.234

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.540	0.210
2325	0.750	0.490
1970	0.950	0.870
1530	0.988	0.970
1060	0.998	0.994
700	0.998	0.994
660	0.996	0.991
620	0.996	0.990
580	0.997	0.992
546	0.997	0.992
500	0.995	0.988
460	0.990	0.976
436	0.987	0.969
420	0.985	0.963
405	0.982	0.955
400	0.979	0.950
390	0.971	0.930
380	0.959	0.900
370	0.930	0.830
365	0.910	0.780
350	0.800	0.570
334	0.570	0.240
320	0.250	0.040
310	0.060	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/31

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2900
$P_{C,s}$	0.5453
$P_{d,C}$	0.3052
$P_{e,d}$	0.2385
$P_{g,F}$	0.5411
$P_{i,h}$	0.7630

Relative Partial Dispersion P'

$P'_{s,t}$	0.2877
$P'_{C',s}$	0.5892
$P'_{d,C'}$	0.2545
$P'_{e,d}$	0.2366
$P'_{g,F'}$	0.4804
$P'_{i,h}$	0.7569

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0052
$\Delta P_{C,s}$	0.0023
$\Delta P_{F,e}$	-0.0005
$\Delta P_{g,F}$	-0.0017
$\Delta P_{i,g}$	-0.0090

Chemical Properties

CR	4
FR	2
SR	53.2
AR	4.3
PR	4.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.1
T_g [°C]	639
$T_{10^{13}}$ [°C]	627
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.590
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.74
E [10^3 N/mm²]	91
µ	0.272
K [10^{-6} mm²/N]	1.74
$HK_{0.1/20}$	600
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.6	1.1	1.6	-1.6	-1.2	-0.7
+20/+40	0.5	1.0	1.6	-0.9	-0.4	0.1
+60/+80	0.7	1.3	1.9	-0.4	0.1	0.7

Datasheet

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N-LAK22
651559.377

n_d = 1.65113	ν_d = 55.89	$n_F - n_C$ = 0.011650
n_e = 1.65391	ν_e = 55.63	$n_{F'} - n_{C'}$ = 0.011755

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.61915
$n_{1970.1}$	1970.1	1.62488
$n_{1529.6}$	1529.6	1.63100
$n_{1060.0}$	1060.0	1.63747
n_t	1014.0	1.63823
n_s	852.1	1.64141
n_r	706.5	1.64560
n_C	656.3	1.64760
$n_{C'}$	643.8	1.64816
$n_{632.8}$	632.8	1.64868
n_D	589.3	1.65103
n_d	587.6	1.65113
n_e	546.1	1.65391
n_F	486.1	1.65925
$n_{F'}$	480.0	1.65992
n_g	435.8	1.66562
n_h	404.7	1.67092
n_i	365.0	1.67997
$n_{334.1}$	334.1	1.68975
$n_{312.6}$	312.6	1.69876
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.142297810
B_2	0.535138441
B_3	1.040883850
C_1	0.005857786
C_2	0.0198546147
C_3	100.83401700

Constants of Formula for dn/dT

D_0	1.36E-06
D_1	1.49E-08
D_2	-1.29E-11
E_0	3.41E-07
E_1	2.09E-10
λ_{TK} [µm]	0.262

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.71	0.43
2325	0.85	0.67
1970	0.967	0.92
1530	0.994	0.986
1060	0.999	0.998
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.996	0.991
460	0.994	0.986
436	0.993	0.983
420	0.993	0.982
405	0.992	0.979
400	0.991	0.977
390	0.989	0.972
380	0.985	0.963
370	0.978	0.95
365	0.973	0.93
350	0.95	0.87
334	0.89	0.74
320	0.77	0.52
310	0.63	0.31
300	0.43	0.12
290	0.21	0.02
280	0.11	0.00
270		
260		
250		

Color Code

λ80 / λ5	34/28

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2729
$P_{C,s}$	0.5314
$P_{d,C}$	0.3031
$P_{e,d}$	0.2384
$P_{g,F}$	0.5467
$P_{i,h}$	0.7771

Relative Partial Dispersion P'

$P'_{s,t}$	0.2704
$P'_{C',s}$	0.5744
$P'_{d,C'}$	0.2527
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4851
$P'_{i,h}$	0.7702

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0058
$\Delta P_{C,s}$	-0.0018
$\Delta P_{F,e}$	-0.0005
$\Delta P_{g,F}$	-0.0031
$\Delta P_{i,g}$	-0.0236

Chemical Properties

CR	2
FR	2
SR	51.2
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	689
$T_{10^{13}}$ [°C]	673
$T_{10^{7.6}}$ [°C]	
c_p [J/(g*K)]	0.540
λ [W/(m•K)]	0.750
ρ [g/cm³]	3.77
E [10^3 N/mm²]	90
µ	0.266
K [10^{-6} mm²/N]	1.82
$HK_{0.1/20}$	600
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.2	2.9	3.6	0.0	0.6	1.3
+20/+40	2.4	3.1	3.9	1.0	1.7	2.4
+60/+80	2.7	3.4	4.2	1.6	2.3	3.1

Datasheet

N-LAK28
744508.409

n_d = 1.74429	ν_d = 50.77	$n_F - n_C$ = 0.014660
n_e = 1.74778	ν_e = 50.54	$n_{F'} - n_{C'}$ = 0.014797

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70318
$n_{1970.1}$	1970.1	1.71077
$n_{1529.6}$	1529.6	1.71877
$n_{1060.0}$	1060.0	1.72709
n_t	1014.0	1.72805
n_s	852.1	1.73207
n_r	706.5	1.73734
n_C	656.3	1.73985
$n_{C'}$	643.8	1.74056
$n_{632.8}$	632.8	1.74121
n_D	589.3	1.74416
n_d	587.6	1.74429
n_e	546.1	1.74778
n_F	486.1	1.75451
$n_{F'}$	480.0	1.75535
n_g	435.8	1.76257
n_h	404.7	1.76931
n_i	365.0	1.78090
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.504419860
B_2	0.474120561
B_3	1.177843540
C_1	0.007196656
C_2	0.0249143227
C_3	83.14432100

Constants of Formula for dn/dT

D_0	5.01E-06
D_1	1.12E-08
D_2	-1.08E-11
E_0	4.68E-07
E_1	3.34E-10
λ_{TK} [µm]	0.226

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500		
2325	0.700	0.410
1970	0.950	0.880
1530	0.992	0.980
1060	0.998	0.995
700	0.998	0.994
660	0.997	0.993
620	0.997	0.993
580	0.997	0.993
546	0.998	0.994
500	0.997	0.992
460	0.992	0.980
436	0.988	0.970
420	0.980	0.950
405	0.959	0.900
400	0.950	0.870
390	0.910	0.800
380	0.850	0.670
370	0.760	0.500
365	0.690	0.390
350	0.380	0.090
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/34

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2740
$P_{C,s}$	0.5307
$P_{d,C}$	0.3025
$P_{e,d}$	0.2382
$P_{g,F}$	0.5499
$P_{i,h}$	0.7905

Relative Partial Dispersion P'

$P'_{s,t}$	0.2715
$P'_{C',s}$	0.5734
$P'_{d,C'}$	0.2521
$P'_{e,d}$	0.2360
$P'_{g,F'}$	0.4879
$P'_{i,h}$	0.7832

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0189
$\Delta P_{C,s}$	0.0095
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0085
$\Delta P_{i,g}$	-0.0484

Chemical Properties

CR	2
FR	1
SR	52.3
AR	1
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.8
T_g [°C]	625
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	
c_p [J/(g*K)]	0.595
λ [W/(m•K)]	0.837
ρ [g/cm³]	4.09
E [10^3 N/mm²]	117
µ	0.291
K [10^{-6} mm²/N]	1.71
$HK_{0.1/20}$	740

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.7	5.6	6.6	2.4	3.3	4.1
+20/+40	4.7	5.7	6.7	3.3	4.2	5.2
+60/+80	4.9	5.9	7.0	3.7	4.7	5.8

Datasheet

SCHOTT
glass made of ideas

N-LAK33B
755523.422

n_d = 1.75500	ν_d = 52.30	$n_F - n_C$ = 0.014436
n_e = 1.75844	ν_e = 52.07	$n_{F'} - n_{C'}$ = 0.014566

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.71387
$n_{1970.1}$	1970.1	1.72155
$n_{1529.6}$	1529.6	1.72962
$n_{1060.0}$	1060.0	1.73796
n_t	1014.0	1.73892
n_s	852.1	1.74292
n_r	706.5	1.74814
n_C	656.3	1.75062
$n_{C'}$	643.8	1.75132
$n_{632.8}$	632.8	1.75197
n_D	589.3	1.75487
n_d	587.6	1.75500
n_e	546.1	1.75844
n_F	486.1	1.76506
$n_{F'}$	480.0	1.76589
n_g	435.8	1.77296
n_h	404.7	1.77954
n_i	365.0	1.79082
$n_{334.1}$	334.1	1.80306
$n_{312.6}$	312.6	1.81436
$n_{296.7}$	296.7	1.82471
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.422886010
B_2	0.593661336
B_3	1.161352600
C_1	0.006702835
C_2	0.0219416210
C_3	80.74077010

Constants of Formula for dn/dT

D_0	2.77E-06
D_1	1.24E-08
D_2	1.22E-11
E_0	5.19E-07
E_1	6.02E-10
λ_{TK} [µm]	0.184

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.400	0.100
2325	0.680	0.380
1970	0.940	0.850
1530	0.985	0.963
1060	0.998	0.995
700	0.998	0.995
660	0.998	0.994
620	0.997	0.993
580	0.998	0.994
546	0.998	0.995
500	0.997	0.993
460	0.994	0.986
436	0.992	0.979
420	0.988	0.971
405	0.982	0.956
400	0.980	0.950
390	0.971	0.930
380	0.954	0.890
370	0.930	0.830
365	0.910	0.790
350	0.820	0.610
334	0.660	0.350
320	0.460	0.140
310	0.280	0.030
300	0.220	0.010
290	0.120	0.000
280	0.020	
270	0.000	
260		
250		

Color Code

λ80 / λ5	37/28

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2768
$P_{C,s}$	0.5337
$P_{d,C}$	0.3032
$P_{e,d}$	0.2383
$P_{g,F}$	0.5473
$P_{i,h}$	0.7813

Relative Partial Dispersion P'

$P'_{s,t}$	0.2744
$P'_{C',s}$	0.5767
$P'_{d,C'}$	0.2527
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4857
$P'_{i,h}$	0.7743

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0175
$\Delta P_{C,s}$	0.0089
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0085
$\Delta P_{i,g}$	-0.0484

Chemical Properties

CR	1
FR	1
SR	51.3
AR	1
PR	2
SR-J	4
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	668
$T_{10^{13}}$ [°C]	670
$T_{10^{7.6}}$ [°C]	750
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.890
AT [°C]	702
ρ [g/cm^3]	4.22
E [10^3 N/mm^2]	122
µ	0.295
K [10^{-6} mm^2/N]	1.43
$HK_{0.1/20}$	797

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.5	4.4	5.2	1.2	2.0	2.8
+20/+40	3.5	4.5	5.4	2.0	3.0	3.9
+60/+80	3.9	4.9	5.9	2.7	3.7	4.7

Datasheet

SCHOTT
glass made of ideas

N-LAK34
729545.402

n_d = 1.72916	ν_d = 54.50	$n_F - n_C$ = 0.013379
n_e = 1.73235	ν_e = 54.27	$n_{F'} - n_{C'}$ = 0.013493

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.68925
$n_{1970.1}$	1970.1	1.69695
$n_{1529.6}$	1529.6	1.70500
$n_{1060.0}$	1060.0	1.71315
n_t	1014.0	1.71407
n_s	852.1	1.71787
n_r	706.5	1.72277
n_C	656.3	1.72509
$n_{C'}$	643.8	1.72574
$n_{632.8}$	632.8	1.72634
n_D	589.3	1.72904
n_d	587.6	1.72916
n_e	546.1	1.73235
n_F	486.1	1.73847
$n_{F'}$	480.0	1.73923
n_g	435.8	1.74575
n_h	404.7	1.75180
n_i	365.0	1.76214
$n_{334.1}$	334.1	1.77331
$n_{312.6}$	312.6	1.78359
$n_{296.7}$	296.7	1.79296
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.266614420
B_2	0.665919318
B_3	1.124961200
C_1	0.005892781
C_2	0.0197509041
C_3	78.88941740

Constants of Formula for dn/dT

D_0	1.96E-06
D_1	9.65E-09
D_2	4.40E-12
E_0	4.91E-07
E_1	5.28E-10
λ_{TK} [µm]	0.161

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.400	0.100
2325	0.670	0.370
1970	0.940	0.850
1530	0.984	0.960
1060	0.998	0.995
700	0.999	0.997
660	0.999	0.997
620	0.998	0.996
580	0.998	0.995
546	0.999	0.997
500	0.998	0.994
460	0.995	0.987
436	0.992	0.979
420	0.989	0.972
405	0.983	0.959
400	0.981	0.952
390	0.976	0.940
380	0.963	0.910
370	0.940	0.860
365	0.920	0.820
350	0.850	0.670
334	0.710	0.430
320	0.530	0.200
310	0.380	0.070
300	0.280	0.030
290	0.170	0.010
280	0.070	
270	0.010	
260		
250		

Color Code

λ80 / λ5	37/28

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2841
$P_{C,s}$	0.5398
$P_{d,C}$	0.3042
$P_{e,d}$	0.2384
$P_{g,F}$	0.5443
$P_{i,h}$	0.7726

Relative Partial Dispersion P'

$P'_{s,t}$	0.2817
$P'_{C',s}$	0.5833
$P'_{d,C'}$	0.2536
$P'_{e,d}$	0.2364
$P'_{g,F'}$	0.4832
$P'_{i,h}$	0.7661

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0204
$\Delta P_{C,s}$	0.0099
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0079
$\Delta P_{i,g}$	-0.0423

Chemical Properties

CR	1
FR	0
SR	52.3
AR	1
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.9
T_g [°C]	668
T_{10}^{13} [°C]	668
$T_{10}^{7.6}$ [°C]	740
c_p [J/(g*K)]	0.520
λ [W/(m•K)]	0.820
ρ [g/cm³]	4.02
E [10^3 N/mm²]	117
µ	0.290
K [10^{-6} mm²/N]	1.52
$HK_{0.1/20}$	740
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.1	3.9	4.6	0.8	1.5	2.2
+20/+40	3.0	3.8	4.6	1.5	2.3	3.1
+60/+80	3.1	4.0	4.9	2.0	2.9	3.7

Datasheet

SCHOTT
glass made of ideas

P-LAK35
693532.385

n_d = 1.69350	ν_d = 53.20	$n_F - n_C$ = 0.013036
n_e = 1.69661	ν_e = 52.95	$n_{F'} - n_{C'}$ = 0.013156

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.65762
$n_{1970.1}$	1970.1	1.66411
$n_{1529.6}$	1529.6	1.67100
$n_{1060.0}$	1060.0	1.67824
n_t	1014.0	1.67909
n_s	852.1	1.68264
n_r	706.5	1.68732
n_C	656.3	1.68955
$n_{C'}$	643.8	1.69018
$n_{632.8}$	632.8	1.69077
n_D	589.3	1.69338
n_d	587.6	1.69350
n_e	546.1	1.69661
n_F	486.1	1.70259
$n_{F'}$	480.0	1.70334
n_g	435.8	1.70974
n_h	404.7	1.71569
n_i	365.0	1.72590
$n_{334.1}$	334.1	1.73698
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.393242600
B_2	0.418882766
B_3	1.043807000
C_1	0.007159597
C_2	0.0233637446
C_3	88.32844260

Constants of Formula for dn/dT

D_0	-1.90E-06
D_1	7.99E-09
D_2	7.76E-12
E_0	5.64E-07
E_1	6.57E-10
λ_{TK} [µm]	0.185

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.550	0.220
2325	0.760	0.500
1970	0.950	0.870
1530	0.992	0.981
1060	0.999	0.999
700	0.997	0.993
660	0.997	0.992
620	0.997	0.992
580	0.997	0.993
546	0.998	0.994
500	0.997	0.992
460	0.994	0.985
436	0.992	0.980
420	0.991	0.977
405	0.989	0.973
400	0.988	0.970
390	0.984	0.960
380	0.976	0.940
370	0.962	0.910
365	0.950	0.880
350	0.890	0.740
334	0.750	0.480
320	0.540	0.210
310	0.350	0.060
300	0.160	0.010
290	0.030	0.000
280	0.000	
270		
260		
250		

Color Code

λ80 / λ5	36/29

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2723
$P_{C,s}$	0.5304
$P_{d,C}$	0.3028
$P_{e,d}$	0.2383
$P_{g,F}$	0.5482
$P_{i,h}$	0.7832

Relative Partial Dispersion P'

$P'_{s,t}$	0.2698
$P'_{C',s}$	0.5732
$P'_{d,C'}$	0.2524
$P'_{e,d}$	0.2361
$P'_{g,F'}$	0.4864
$P'_{i,h}$	0.7761

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0053
$\Delta P_{C,s}$	0.0034
$\Delta P_{F,e}$	-0.0015
$\Delta P_{g,F}$	-0.0061
$\Delta P_{i,g}$	-0.0379

Chemical Properties

CR	2
FR	5
SR	53.3
AR	1.3
PR	4.3
SR-J	4
WR-J	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.7
T_g [°C]	508
$T_{10^{13}}$ [°C]	511
$T_{10^{7.6}}$ [°C]	598
c_p [J/(g*K)]	0.630
λ [W/(m•K)]	0.720
AT [°C]	544
ρ [g/cm^3]	3.85
E [10^3 N/mm^2]	101
µ	0.289
K [10^{-6} mm^2/N]	1.76
$HK_{0.1/20}$	616
Abrasion Aa	119

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.1	1.9	2.7	-1.2	-0.4	0.3
+20/+40	0.8	1.7	2.6	-0.7	0.2	1.1
+60/+80	0.9	1.9	2.9	-0.3	0.7	1.7

Datasheet

SCHOTT
glass made of ideas

LLF1
548458.294

n_d = 1.54814	ν_d = 45.75	$n_F - n_C$ = 0.011981
n_e = 1.55099	ν_e = 45.47	$n_{F'} - n_{C'}$ = 0.012118

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.51865
$n_{1970.1}$	1970.1	1.52354
$n_{1529.6}$	1529.6	1.52884
$n_{1060.0}$	1060.0	1.53470
n_t	1014.0	1.53541
n_s	852.1	1.53845
n_r	706.5	1.54256
n_C	656.3	1.54457
$n_{C'}$	643.8	1.54513
$n_{632.8}$	632.8	1.54566
n_D	589.3	1.54803
n_d	587.6	1.54814
n_e	546.1	1.55099
n_F	486.1	1.55655
$n_{F'}$	480.0	1.55725
n_g	435.8	1.56333
n_h	404.7	1.56911
n_i	365.0	1.57932
$n_{334.1}$	334.1	1.59092
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.216401250
B_2	0.133664540
B_3	0.883399468
C_1	0.008578072
C_2	0.0420143003
C_3	107.59306000

Constants of Formula for dn/dT

D_0	3.25E-07
D_1	1.74E-08
D_2	-6.12E-11
E_0	6.53E-07
E_1	2.58E-10
λ_{TK} [µm]	0.233

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.76	0.50
2325	0.82	0.61
1970	0.93	0.84
1530	0.996	0.990
1060	0.998	0.996
700	0.999	0.997
660	0.998	0.996
620	0.998	0.996
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.998	0.996
436	0.998	0.996
420	0.998	0.995
405	0.998	0.994
400	0.997	0.993
390	0.997	0.992
380	0.995	0.988
370	0.994	0.984
365	0.992	0.981
350	0.982	0.955
334	0.92	0.81
320	0.62	0.30
310	0.24	0.01
300	0.02	
290	0.00	
280		
270		
260		
250		

Color Code

λ80 / λ5	33/31

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2537
$P_{C,s}$	0.5108
$P_{d,C}$	0.2983
$P_{e,d}$	0.2376
$P_{g,F}$	0.5660
$P_{i,h}$	0.8520

Relative Partial Dispersion P'

$P'_{s,t}$	0.2508
$P'_{C',s}$	0.5516
$P'_{d,C'}$	0.2484
$P'_{e,d}$	0.2349
$P'_{g,F'}$	0.5017
$P'_{i,h}$	0.8424

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0025
$\Delta P_{C,s}$	0.0012
$\Delta P_{F,e}$	-0.0003
$\Delta P_{g,F}$	-0.0009
$\Delta P_{i,g}$	-0.0062

Chemical Properties

CR	1
FR	0
SR	1
AR	2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	431
$T_{10^{13}}$ [°C]	426
$T_{10^{7.6}}$ [°C]	628
c_p [J/(g*K)]	0.650
λ [W/(m•K)]	0.990
ρ [g/cm³]	2.94
E [10^3 N/mm²]	60
µ	0.208
K [10^{-6} mm²/N]	3.03
$HK_{0.1/20}$	450
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.5	2.4	3.4	-0.6	0.3	1.3
+20/+40	1.9	2.9	3.9	0.6	1.5	2.5
+60/+80	2.0	3.0	4.1	1.0	2.0	3.0

Datasheet

LLF1HTi
548459.294

n_d = 1.54815	ν_d = 45.90	$n_F - n_C$ = 0.011942
n_e = 1.55099	ν_e = 45.62	$n_{F'} - n_{C'}$ = 0.012078

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.51863
$n_{1970.1}$	1970.1	1.52354
$n_{1529.6}$	1529.6	1.52886
$n_{1060.0}$	1060.0	1.53473
n_t	1014.0	1.53544
n_s	852.1	1.53848
n_r	706.5	1.54259
n_C	656.3	1.54459
$n_{C'}$	643.8	1.54515
$n_{632.8}$	632.8	1.54568
n_D	589.3	1.54804
n_d	587.6	1.54815
n_e	546.1	1.55099
n_F	486.1	1.55653
$n_{F'}$	480.0	1.55723
n_g	435.8	1.56328
n_h	404.7	1.56904
n_i	365.0	1.57920
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.225104450
B_2	0.125155671
B_3	0.892236751
C_1	0.008704321
C_2	0.0427325235
C_3	108.04996800

Constants of Formula for dn/dT

D_0	2.55E-07
D_1	1.41E-08
D_2	-3.32E-11
E_0	6.74E-07
E_1	6.27E-10
λ_{TK} [µm]	0.227

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.74	0.48
2325	0.80	0.58
1970	0.93	0.83
1530	0.996	0.990
1060	0.999	0.999
700	0.999	0.999
660	0.999	0.998
620	0.999	0.998
580	0.999	0.998
546	0.999	0.998
500	0.999	0.998
460	0.999	0.998
436	0.999	0.997
420	0.999	0.997
405	0.999	0.997
400	0.999	0.997
390	0.998	0.996
380	0.998	0.995
370	0.998	0.994
365	0.997	0.993
350	0.993	0.982
334	0.955	0.89
320	0.72	0.44
310	0.23	0.03
300	0.00	0.00
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/31

Remarks

i-line glass

Relative Partial Dispersion P

$P_{s,t}$	0.2544
$P_{C,s}$	0.5114
$P_{d,C}$	0.2985
$P_{e,d}$	0.2376
$P_{g,F}$	0.5656
$P_{i,h}$	0.8512

Relative Partial Dispersion P'

$P'_{s,t}$	0.2515
$P'_{C',s}$	0.5523
$P'_{d,C'}$	0.2485
$P'_{e,d}$	0.2349
$P'_{g,F'}$	0.5014
$P'_{i,h}$	0.8416

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	0.0015
$\Delta P_{F,e}$	-0.0003
$\Delta P_{g,F}$	-0.0010
$\Delta P_{i,g}$	-0.0062

Chemical Properties

CR	1
FR	0
SR	1
AR	2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	431
$T_{10^{13}}$ [°C]	426
$T_{10^{7.6}}$ [°C]	628
c_p [J/(g*K)]	0.650
λ [W/(m•K)]	0.990
ρ [g/cm³]	2.94
E [10^3 N/mm²]	60
µ	0.208
K [10^{-6} mm²/N]	3.03
$HK_{0.1/20}$	450

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.7	2.6	3.5	-0.4	0.5	1.4
+20/+40	1.8	2.9	3.9	0.5	1.5	2.5
+60/+80	2.0	3.1	4.2	0.9	2.0	3.1

Datasheet

SCHOTT
glass made of ideas

LF5
581409.322

n_d = 1.58144	ν_d = 40.85	$n_F - n_C$ = 0.014233
n_e = 1.58482	ν_e = 40.57	$n_{F'} - n_{C'}$ = 0.014413

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54966
$n_{1970.1}$	1970.1	1.55445
$n_{1529.6}$	1529.6	1.55975
$n_{1060.0}$	1060.0	1.56594
n_t	1014.0	1.56672
n_s	852.1	1.57014
n_r	706.5	1.57489
n_C	656.3	1.57723
$n_{C'}$	643.8	1.57789
$n_{632.8}$	632.8	1.57851
n_D	589.3	1.58132
n_d	587.6	1.58144
n_e	546.1	1.58482
n_F	486.1	1.59146
$n_{F'}$	480.0	1.59231
n_g	435.8	1.59964
n_h	404.7	1.60668
n_i	365.0	1.61926
$n_{334.1}$	334.1	1.63380
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.280356280
B_2	0.163505973
B_3	0.893930112
C_1	0.009298544
C_2	0.0449135769
C_3	110.49368500

Constants of Formula for dn/dT

D_0	-2.27E-06
D_1	9.71E-09
D_2	-2.83E-11
E_0	8.36E-07
E_1	9.95E-10
λ_{TK} [µm]	0.228

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500		
2325	0.85	0.66
1970	0.95	0.87
1530	0.997	0.992
1060	0.999	0.998
700	0.999	0.998
660	0.999	0.998
620	0.999	0.998
580	0.999	0.997
546	0.999	0.997
500	0.998	0.996
460	0.998	0.995
436	0.998	0.994
420	0.997	0.993
405	0.997	0.992
400	0.997	0.992
390	0.994	0.984
380	0.989	0.973
370	0.984	0.961
365	0.981	0.954
350	0.950	0.88
334	0.80	0.57
320	0.32	0.04
310	0.04	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	34/31

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2401
$P_{C,s}$	0.4981
$P_{d,C}$	0.2959
$P_{e,d}$	0.2373
$P_{g,F}$	0.5748
$P_{i,h}$	0.8836

Relative Partial Dispersion P'

$P'_{s,t}$	0.2371
$P'_{C',s}$	0.5378
$P'_{d,C'}$	0.2462
$P'_{e,d}$	0.2343
$P'_{g,F'}$	0.5091
$P'_{i,h}$	0.8726

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0006
$\Delta P_{C,s}$	0.0000
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0003
$\Delta P_{i,g}$	-0.0037

Chemical Properties

CR	2
FR	0
SR	1
AR	2.3
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.6
T_g [°C]	419
$T_{10^{13}}$ [°C]	411
$T_{10^{7.6}}$ [°C]	585
c_p [J/(g*K)]	0.657
λ [W/(m•K)]	0.866
ρ [g/cm³]	3.22
E [10^3 N/mm²]	59
µ	0.223
K [10^{-6} mm²/N]	2.80
$HK_{0.1/20}$	450
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.8	1.9	3.1	-1.3	-0.2	0.9
+20/+40	0.8	2.0	3.4	-0.6	0.7	2.0
+60/+80	0.8	2.2	3.7	-0.3	1.1	2.6

Datasheet

LF5HTi
581409.322

n_d = 1.58144 ν_d = 40.89 $n_F - n_C$ = 0.014220
n_e = 1.58482 ν_e = 40.61 $n_{F'} - n_{C'}$ = 0.014400

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.54970
$n_{1970.1}$	1970.1	1.55448
$n_{1529.6}$	1529.6	1.55978
$n_{1060.0}$	1060.0	1.56596
n_t	1014.0	1.56674
n_s	852.1	1.57015
n_r	706.5	1.57490
n_C	656.3	1.57724
$n_{C'}$	643.8	1.57790
$n_{632.8}$	632.8	1.57852
n_D	589.3	1.58132
n_d	587.6	1.58144
n_e	546.1	1.58482
n_F	486.1	1.59145
$n_{F'}$	480.0	1.59230
n_g	435.8	1.59963
n_h	404.7	1.60665
n_i	365.0	1.61921
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.285529240
B_2	0.158357622
B_3	0.892175122
C_1	0.009398863
C_2	0.0452566659
C_3	110.54482900

Constants of Formula for dn/dT

D_0	-2.26E-06
D_1	1.17E-08
D_2	-4.14E-11
E_0	8.24E-07
E_1	7.78E-10
λ_{TK} [µm]	0.232

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.78	0.53
2325	0.83	0.63
1970	0.94	0.85
1530	0.996	0.991
1060	0.999	0.999
700	0.999	0.999
660	0.999	0.999
620	0.999	0.999
580	0.999	0.999
546	0.999	0.999
500	0.999	0.998
460	0.999	0.998
436	0.999	0.998
420	0.999	0.997
405	0.999	0.997
400	0.999	0.997
390	0.999	0.996
380	0.998	0.995
370	0.997	0.993
365	0.996	0.991
350	0.985	0.962
334	0.89	0.75
320	0.38	0.09
310	0.02	0.00
300	0.00	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	33/31

Remarks

i-line glass

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2401
$P_{C,s}$	0.4982
$P_{d,C}$	0.2959
$P_{e,d}$	0.2373
$P_{g,F}$	0.5746
$P_{i,h}$	0.8831

Relative Partial Dispersion P'

$P'_{s,t}$	0.2371
$P'_{C',s}$	0.5380
$P'_{d,C'}$	0.2462
$P'_{e,d}$	0.2343
$P'_{g,F'}$	0.5090
$P'_{i,h}$	0.8721

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0006
$\Delta P_{C,s}$	0.0000
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0004
$\Delta P_{i,g}$	-0.0041

Chemical Properties

CR	2
FR	0
SR	1
AR	2.3
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.6
T_g [°C]	419
$T_{10^{13}}$ [°C]	411
$T_{10^{7.6}}$ [°C]	585
c_p [J/(g*K)]	0.657
λ [W/(m•K)]	0.866
ρ [g/cm³]	3.22
E [10^3 N/mm²]	59
µ	0.223
K [10^{-6} mm²/N]	2.80
$HK_{0.1/20}$	450

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.7	1.8	3.0	-1.4	-0.3	0.8
+20/+40	0.8	2.0	3.4	-0.6	0.7	2.0
+60/+80	0.8	2.2	3.6	-0.3	1.1	2.5

Datasheet

SCHOTT
glass made of ideas

N-F2
620364.265

n_d = 1.62005	ν_d = 36.43	$n_F - n_C$ = 0.017020
n_e = 1.62408	ν_e = 36.16	$n_{F'} - n_{C'}$ = 0.017258

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58136
$n_{1970.1}$	1970.1	1.58744
$n_{1529.6}$	1529.6	1.59410
$n_{1060.0}$	1060.0	1.60167
n_t	1014.0	1.60261
n_s	852.1	1.60667
n_r	706.5	1.61229
n_C	656.3	1.61506
$n_{C'}$	643.8	1.61584
$n_{632.8}$	632.8	1.61658
n_D	589.3	1.61990
n_d	587.6	1.62005
n_e	546.1	1.62408
n_F	486.1	1.63208
$n_{F'}$	480.0	1.63310
n_g	435.8	1.64209
n_h	404.7	1.65087
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.397570370
B_2	0.159201403
B_3	1.268654300
C_1	0.009959061
C_2	0.0546931752
C_3	119.24834600

Constants of Formula for dn/dT

D_0	4.62E-07
D_1	1.17E-08
D_2	-2.35E-11
E_0	7.47E-07
E_1	9.81E-10
λ_{TK} [µm]	0.263

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.75	0.48
2325	0.84	0.64
1970	0.950	0.88
1530	0.991	0.977
1060	0.998	0.996
700	0.997	0.992
660	0.996	0.990
620	0.996	0.991
580	0.997	0.993
546	0.997	0.992
500	0.994	0.984
460	0.989	0.973
436	0.985	0.963
420	0.980	0.950
405	0.959	0.90
400	0.95	0.87
390	0.89	0.75
380	0.76	0.51
370	0.48	0.16
365	0.28	0.04
350	0.10	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2389
$P_{C,s}$	0.4925
$P_{d,C}$	0.2935
$P_{e,d}$	0.2366
$P_{g,F}$	0.5881
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2356
$P'_{C',s}$	0.5312
$P'_{d,C'}$	0.2440
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5208
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0137
$\Delta P_{C,s}$	0.0047
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0056
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.1
T_g [°C]	569
$T_{10^{13}}$ [°C]	567
$T_{10^{7.6}}$ [°C]	686
c_p [J/(g*K)]	0.810
λ [W/(m•K)]	1.050
ρ [g/cm³]	2.65
E [10^3 N/mm²]	82
µ	0.228
K [10^{-6} mm²/N]	3.03
$HK_{0.1/20}$	600
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.0	3.2	4.6	-0.1	1.0	2.3
+20/+40	2.1	3.5	5.1	0.7	2.0	3.6
+60/+80	2.2	3.7	5.5	1.1	2.6	4.4

Datasheet

F2HT
620364.360

n_d = 1.62004 ν_d = 36.37 $n_F - n_C$ = 0.017050
n_e = 1.62408 ν_e = 36.11 $n_{F'} - n_{C'}$ = 0.017284

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58465
$n_{1970.1}$	1970.1	1.58958
$n_{1529.6}$	1529.6	1.59513
$n_{1060.0}$	1060.0	1.60190
n_t	1014.0	1.60279
n_s	852.1	1.60671
n_r	706.5	1.61227
n_C	656.3	1.61503
$n_{C'}$	643.8	1.61582
$n_{632.8}$	632.8	1.61656
n_D	589.3	1.61989
n_d	587.6	1.62004
n_e	546.1	1.62408
n_F	486.1	1.63208
$n_{F'}$	480.0	1.63310
n_g	435.8	1.64202
n_h	404.7	1.65064
n_i	365.0	1.66623
$n_{334.1}$	334.1	1.68455
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.345333590
B_2	0.209073176
B_3	0.937357162
C_1	0.009977439
C_2	0.0470450767
C_3	111.88676400

Constants of Formula for dn/dT

D_0	1.51E-06
D_1	1.56E-08
D_2	-2.78E-11
E_0	9.34E-07
E_1	1.04E-09
λ_{TK} [µm]	0.250

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.870	0.710
2325	0.910	0.800
1970	0.968	0.920
1530	0.998	0.994
1060	0.999	0.998
700	0.999	0.998
660	0.999	0.997
620	0.999	0.998
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.995
436	0.998	0.994
420	0.997	0.994
405	0.997	0.992
400	0.996	0.991
390	0.995	0.988
380	0.993	0.982
370	0.988	0.971
365	0.983	0.957
350	0.930	0.830
334	0.570	0.240
320	0.080	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	35/32

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2301
$P_{C,s}$	0.4882
$P_{d,C}$	0.2938
$P_{e,d}$	0.2370
$P_{g,F}$	0.5828
$P_{i,h}$	0.9142

Relative Partial Dispersion P'

$P'_{s,t}$	0.2270
$P'_{C',s}$	0.5270
$P'_{d,C'}$	0.2443
$P'_{e,d}$	0.2338
$P'_{g,F'}$	0.5159
$P'_{i,h}$	0.9018

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0008
$\Delta P_{C,s}$	0.0005
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	0.0002
$\Delta P_{i,g}$	0.0006

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	434
$T_{10^{13}}$ [°C]	430
$T_{10^{7.6}}$ [°C]	594
c_p [J/(g*K)]	0.557
λ [W/(m•K)]	0.780
ρ [g/cm³]	3.60
E [10^3 N/mm²]	57
µ	0.220
K [10^{-6} mm²/N]	2.81
$HK_{0.1/20}$	420
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.4	3.9	5.5	0.3	1.6	3.2
+20/+40	2.7	4.4	6.3	1.3	3.0	4.8
+60/+80	3.0	4.8	6.8	1.9	3.7	5.7

Datasheet

F2HTi
620364.360

n_d = 1.62004	ν_d = 36.37	$n_F - n_C$ = 0.017050
n_e = 1.62408	ν_e = 36.11	$n_{F'} - n_{C'}$ = 0.017284

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58465
$n_{1970.1}$	1970.1	1.58958
$n_{1529.6}$	1529.6	1.59513
$n_{1060.0}$	1060.0	1.60190
n_t	1014.0	1.60279
n_s	852.1	1.60671
n_r	706.5	1.61227
n_C	656.3	1.61503
$n_{C'}$	643.8	1.61582
$n_{632.8}$	632.8	1.61656
n_D	589.3	1.61989
n_d	587.6	1.62004
n_e	546.1	1.62408
n_F	486.1	1.63208
$n_{F'}$	480.0	1.63310
n_g	435.8	1.64202
n_h	404.7	1.65064
n_i	365.0	1.66623
$n_{334.1}$	334.1	1.68455
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.345333590
B_2	0.209073176
B_3	0.937357162
C_1	0.009977439
C_2	0.0470450767
C_3	111.88676400

Constants of Formula for dn/dT

D_0	1.51E-06
D_1	1.56E-08
D_2	-2.78E-11
E_0	9.34E-07
E_1	1.04E-09
λ_{TK} [µm]	0.250

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.870	0.710
2325	0.910	0.800
1970	0.968	0.920
1530	0.998	0.994
1060	0.999	0.998
700	0.999	0.998
660	0.999	0.997
620	0.999	0.998
580	0.999	0.998
546	0.999	0.998
500	0.999	0.997
460	0.998	0.994
436	0.997	0.993
420	0.996	0.991
405	0.995	0.987
400	0.994	0.986
390	0.994	0.986
380	0.994	0.985
370	0.989	0.973
365	0.985	0.962
350	0.930	0.830
334	0.600	0.270
320	0.080	0.000
310	0.000	0.000
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	0,000000

Remarks

i-line glass

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2301
$P_{C,s}$	0.4882
$P_{d,C}$	0.2938
$P_{e,d}$	0.2370
$P_{g,F}$	0.5828
$P_{i,h}$	0.9142

Relative Partial Dispersion P'

$P'_{s,t}$	0.2270
$P'_{C',s}$	0.5270
$P'_{d,C'}$	0.2443
$P'_{e,d}$	0.2338
$P'_{g,F'}$	0.5159
$P'_{i,h}$	0.9018

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0008
$\Delta P_{C,s}$	0.0005
$\Delta P_{F,e}$	0.0000
$\Delta P_{g,F}$	0.0002
$\Delta P_{i,g}$	0.0006

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	434
$T_{10^{13}}$ [°C]	430
$T_{10^{7.6}}$ [°C]	594
c_p [J/(g*K)]	0.557
λ [W/(m•K)]	0.780
ρ [g/cm³]	3.60
E [10^3 N/mm²]	57
µ	0.220
K [10^{-6} mm²/N]	2.81
$HK_{0.1/20}$	420
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.4	3.9	5.5	0.3	1.6	3.2
+20/+40	2.7	4.4	6.3	1.3	3.0	4.8
+60/+80	3.0	4.8	6.8	1.9	3.7	5.7

Datasheet

SCHOTT
glass made of ideas

F5
603380.347

n_d = 1.60342	ν_d = 38.03	$n_F - n_C$ = 0.015867
n_e = 1.60718	ν_e = 37.77	$n_{F'} - n_{C'}$ = 0.016078

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.56934
$n_{1970.1}$	1970.1	1.57427
$n_{1529.6}$	1529.6	1.57979
$n_{1060.0}$	1060.0	1.58636
n_t	1014.0	1.58721
n_s	852.1	1.59093
n_r	706.5	1.59616
n_C	656.3	1.59875
$n_{C'}$	643.8	1.59948
$n_{632.8}$	632.8	1.60017
n_D	589.3	1.60328
n_d	587.6	1.60342
n_e	546.1	1.60718
n_F	486.1	1.61461
$n_{F'}$	480.0	1.61556
n_g	435.8	1.62381
n_h	404.7	1.63176
n_i	365.0	1.64606
$n_{334.1}$	334.1	1.66276
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.310446300
B_2	0.196034260
B_3	0.966129770
C_1	0.009586330
C_2	0.0457627627
C_3	115.01188300

Constants of Formula for dn/dT

D_0	2.13E-06
D_1	1.65E-08
D_2	-6.98E-11
E_0	1.02E-06
E_1	6.56E-10
λ_{TK} [µm]	0.208

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.790	0.550
2325	0.840	0.650
1970	0.940	0.860
1530	0.995	0.987
1060	0.999	0.998
700	0.999	0.997
660	0.998	0.996
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.998	0.994
460	0.996	0.991
436	0.996	0.990
420	0.995	0.988
405	0.994	0.985
400	0.993	0.982
390	0.989	0.973
380	0.984	0.960
370	0.971	0.930
365	0.963	0.910
350	0.900	0.760
334	0.620	0.300
320	0.080	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	35/32

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2346
$P_{C,s}$	0.4925
$P_{d,C}$	0.2946
$P_{e,d}$	0.2371
$P_{g,F}$	0.5795
$P_{i,h}$	0.9015

Relative Partial Dispersion P'

$P'_{s,t}$	0.2315
$P'_{C',s}$	0.5317
$P'_{d,C'}$	0.2451
$P'_{e,d}$	0.2340
$P'_{g,F'}$	0.5131
$P'_{i,h}$	0.8897

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0017
$\Delta P_{C,s}$	0.0009
$\Delta P_{F,e}$	-0.0001
$\Delta P_{g,F}$	-0.0003
$\Delta P_{i,g}$	-0.0028

Chemical Properties

CR	1
FR	0
SR	1
AR	2.3
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.9
T_g [°C]	438
$T_{10^{13}}$ [°C]	425
$T_{10^{7.6}}$ [°C]	608
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.47
E [10^3 N/mm²]	58
µ	0.220
K [10^{-6} mm²/N]	2.92
$HK_{0.1/20}$	450
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.5	4.0	5.5	0.4	1.8	3.3
+20/+40	3.0	4.6	6.2	1.6	3.2	4.8
+60/+80	3.1	4.8	6.5	2.0	3.7	5.4

Datasheet

SCHOTT
glass made of ideas

N-F2
620364.265

n_d = 1.62005	ν_d = 36.43	$n_F - n_C$ = 0.017020
n_e = 1.62408	ν_e = 36.16	$n_{F'} - n_{C'}$ = 0.017258

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58136
$n_{1970.1}$	1970.1	1.58744
$n_{1529.6}$	1529.6	1.59410
$n_{1060.0}$	1060.0	1.60167
n_t	1014.0	1.60261
n_s	852.1	1.60667
n_r	706.5	1.61229
n_C	656.3	1.61506
$n_{C'}$	643.8	1.61584
$n_{632.8}$	632.8	1.61658
n_D	589.3	1.61990
n_d	587.6	1.62005
n_e	546.1	1.62408
n_F	486.1	1.63208
$n_{F'}$	480.0	1.63310
n_g	435.8	1.64209
n_h	404.7	1.65087
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.397570370
B_2	0.159201403
B_3	1.268654300
C_1	0.009959061
C_2	0.0546931752
C_3	119.24834600

Constants of Formula for dn/dT

D_0	4.62E-07
D_1	1.17E-08
D_2	-2.35E-11
E_0	7.47E-07
E_1	9.81E-10
λ_{TK} [µm]	0.263

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.75	0.48
2325	0.84	0.64
1970	0.950	0.88
1530	0.991	0.977
1060	0.998	0.996
700	0.997	0.992
660	0.996	0.990
620	0.996	0.991
580	0.997	0.993
546	0.997	0.992
500	0.994	0.984
460	0.989	0.973
436	0.985	0.963
420	0.980	0.950
405	0.959	0.90
400	0.95	0.87
390	0.89	0.75
380	0.76	0.51
370	0.48	0.16
365	0.28	0.04
350	0.10	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2389
$P_{C,s}$	0.4925
$P_{d,C}$	0.2935
$P_{e,d}$	0.2366
$P_{g,F}$	0.5881
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2356
$P'_{C',s}$	0.5312
$P'_{d,C'}$	0.2440
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5208
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0137
$\Delta P_{C,s}$	0.0047
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0056
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.1
T_g [°C]	569
$T_{10^{13}}$ [°C]	567
$T_{10^{7.6}}$ [°C]	686
c_p [J/(g*K)]	0.810
λ [W/(m•K)]	1.050
ρ [g/cm³]	2.65
E [10^3 N/mm²]	82
µ	0.228
K [10^{-6} mm²/N]	3.03
$HK_{0.1/20}$	600
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.0	3.2	4.6	-0.1	1.0	2.3
+20/+40	2.1	3.5	5.1	0.7	2.0	3.6
+60/+80	2.2	3.7	5.5	1.1	2.6	4.4

Datasheet

SCHOTT
glass made of ideas

N-BASF2
664360.315

n_d = 1.66446	ν_d = 36.00	$n_F - n_C$ = 0.018457
n_e = 1.66883	ν_e = 35.73	$n_{F'} - n_{C'}$ = 0.018720

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.62552
$n_{1970.1}$	1970.1	1.63109
$n_{1529.6}$	1529.6	1.63734
$n_{1060.0}$	1060.0	1.64484
n_t	1014.0	1.64581
n_s	852.1	1.65007
n_r	706.5	1.65607
n_C	656.3	1.65905
$n_{C'}$	643.8	1.65990
$n_{632.8}$	632.8	1.66070
n_D	589.3	1.66430
n_d	587.6	1.66446
n_e	546.1	1.66883
n_F	486.1	1.67751
$n_{F'}$	480.0	1.67862
n_g	435.8	1.68838
n_h	404.7	1.69792
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.536520810
B_2	0.156971102
B_3	1.301968150
C_1	0.010843573
C_2	0.0562278762
C_3	131.33970000

Constants of Formula for dn/dT

D_0	1.89E-06
D_1	1.22E-08
D_2	-1.61E-11
E_0	7.77E-07
E_1	9.96E-10
λ_{TK} [µm]	0.256

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.860	0.680
2325	0.900	0.760
1970	0.971	0.930
1530	0.994	0.985
1060	0.999	0.997
700	0.996	0.990
660	0.994	0.985
620	0.994	0.985
580	0.995	0.987
546	0.994	0.985
500	0.988	0.971
460	0.980	0.951
436	0.971	0.930
420	0.954	0.890
405	0.910	0.800
400	0.890	0.750
390	0.800	0.580
380	0.630	0.320
370	0.320	0.060
365	0.160	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2309
$P_{C,s}$	0.4869
$P_{d,C}$	0.2929
$P_{e,d}$	0.2367
$P_{g,F}$	0.5890
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2277
$P'_{C',s}$	0.5253
$P'_{d,C'}$	0.2435
$P'_{e,d}$	0.2333
$P'_{g,F'}$	0.5214
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0021
$\Delta P_{C,s}$	0.0001
$\Delta P_{F,e}$	0.0010
$\Delta P_{g,F}$	0.0057
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.1
T_g [°C]	619
$T_{10^{13}}$ [°C]	622
$T_{10^{7.6}}$ [°C]	766
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.940
ρ [g/cm³]	3.15
E [10^3 N/mm²]	84
µ	0.247
K [10^{-6} mm²/N]	3.04
$HK_{0.1/20}$	580
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.8	4.1	5.6	0.6	1.9	3.3
+20/+40	2.9	4.4	6.2	1.5	3.0	4.7
+60/+80	3.1	4.8	6.7	2.0	3.6	5.5

Datasheet

N-BASF64
704394.320

n_d = 1.70400	ν_d = 39.38	$n_F - n_C$ = 0.017875
n_e = 1.70824	ν_e = 39.12	$n_{F'} - n_{C'}$ = 0.018105

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.66373
$n_{1970.1}$	1970.1	1.66988
$n_{1529.6}$	1529.6	1.67667
$n_{1060.0}$	1060.0	1.68453
n_t	1014.0	1.68551
n_s	852.1	1.68982
n_r	706.5	1.69578
n_C	656.3	1.69872
$n_{C'}$	643.8	1.69955
$n_{632.8}$	632.8	1.70033
n_D	589.3	1.70384
n_d	587.6	1.70400
n_e	546.1	1.70824
n_F	486.1	1.71659
$n_{F'}$	480.0	1.71765
n_g	435.8	1.72690
n_h	404.7	1.73581
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.655542680
B_2	0.171319770
B_3	1.336644480
C_1	0.010448564
C_2	0.0499394756
C_3	118.96147200

Constants of Formula for dn/dT

D_0	1.60E-06
D_1	1.02E-08
D_2	-2.68E-11
E_0	7.87E-07
E_1	9.65E-10
λ_{TK} [µm]	0.229

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.450
2325	0.850	0.670
1970	0.959	0.900
1530	0.988	0.970
1060	0.994	0.985
700	0.988	0.970
660	0.982	0.955
620	0.979	0.950
580	0.979	0.950
546	0.980	0.950
500	0.976	0.940
460	0.967	0.920
436	0.959	0.900
420	0.950	0.880
405	0.930	0.840
400	0.920	0.820
390	0.890	0.750
380	0.820	0.610
370	0.670	0.370
365	0.550	0.220
350	0.090	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2408
$P_{C,s}$	0.4979
$P_{d,C}$	0.2956
$P_{e,d}$	0.2372
$P_{g,F}$	0.5769
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2377
$P'_{C',s}$	0.5375
$P'_{d,C'}$	0.2459
$P'_{e,d}$	0.2342
$P'_{g,F'}$	0.5110
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0069
$\Delta P_{C,s}$	0.0032
$\Delta P_{F,e}$	-0.0004
$\Delta P_{g,F}$	-0.0006
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	3.2
AR	1.2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.7
T_g [°C]	582
$T_{10^{13}}$ [°C]	585
$T_{10^{7.6}}$ [°C]	712
c_p [J/(g*K)]	
λ [W/(m•K)]	
ρ [g/cm³]	3.20
E [10^3 N/mm²]	105
µ	0.264
K [10^{-6} mm²/N]	2.38
$HK_{0.1/20}$	650
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.8	4.1	5.5	0.6	1.8	3.1
+20/+40	2.8	4.3	5.9	1.4	2.8	4.4
+60/+80	2.9	4.5	6.3	1.8	3.4	5.1

Datasheet

SCHOTT
glass made of ideas

N-LAF2
744449.430

n_d = 1.74397	ν_d = 44.85	$n_F - n_C$ = 0.016588
n_e = 1.74791	ν_e = 44.57	$n_{F'} - n_{C'}$ = 0.016780

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70582
$n_{1970.1}$	1970.1	1.71169
$n_{1529.6}$	1529.6	1.71816
$n_{1060.0}$	1060.0	1.72563
n_t	1014.0	1.72656
n_s	852.1	1.73064
n_r	706.5	1.73627
n_C	656.3	1.73903
$n_{C'}$	643.8	1.73981
$n_{632.8}$	632.8	1.74054
n_D	589.3	1.74383
n_d	587.6	1.74397
n_e	546.1	1.74791
n_F	486.1	1.75562
$n_{F'}$	480.0	1.75659
n_g	435.8	1.76500
n_h	404.7	1.77298
n_i	365.0	1.78703
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.809842270
B_2	0.157295550
B_3	1.093003700
C_1	0.010171162
C_2	0.0442431765
C_3	100.68774800

Constants of Formula for dn/dT

D_0	-3.64E-06
D_1	9.20E-09
D_2	-6.00E-12
E_0	6.43E-07
E_1	6.11E-10
λ_{TK} [µm]	0.220

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.690	0.400
2325	0.860	0.690
1970	0.951	0.880
1530	0.994	0.985
1060	0.999	0.997
700	0.998	0.996
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.998	0.994
500	0.993	0.983
460	0.985	0.962
436	0.976	0.940
420	0.965	0.920
405	0.940	0.870
400	0.930	0.840
390	0.900	0.760
380	0.830	0.630
370	0.710	0.430
365	0.630	0.310
350	0.230	0.030
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/34

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2459
$P_{C,s}$	0.5057
$P_{d,C}$	0.2979
$P_{e,d}$	0.2377
$P_{g,F}$	0.5656
$P_{i,h}$	0.8470

Relative Partial Dispersion P'

$P'_{s,t}$	0.2431
$P'_{C',s}$	0.5464
$P'_{d,C'}$	0.2481
$P'_{e,d}$	0.2350
$P'_{g,F'}$	0.5012
$P'_{i,h}$	0.8373

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0061
$\Delta P_{C,s}$	-0.0017
$\Delta P_{F,e}$	-0.0004
$\Delta P_{g,F}$	-0.0027
$\Delta P_{i,g}$	-0.0202

Chemical Properties

CR	2
FR	3
SR	52.2
AR	1
PR	2.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.1
T_g [°C]	653
$T_{10^{13}}$ [°C]	645
$T_{10^{7.6}}$ [°C]	734
c_p [J/(g*K)]	0.510
λ [W/(m•K)]	0.670
ρ [g/cm³]	4.30
E [10^3 N/mm²]	94
µ	0.288
K [10^{-6} mm²/N]	1.42
$HK_{0.1/20}$	530
HG	6

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.0	1.0	2.1	-2.3	-1.3	-0.3
+20/+40	-0.1	1.0	2.3	-1.6	-0.5	0.7
+60/+80	-0.1	1.2	2.5	-1.2	0.0	1.3

Datasheet

N-LAF7
749348.373

n_d = 1.74950 ν_d = 34.82 $n_F - n_C$ = 0.021525
n_e = 1.75459 ν_e = 34.56 $n_{F'} - n_{C'}$ = 0.021833

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70344
$n_{1970.1}$	1970.1	1.71021
$n_{1529.6}$	1529.6	1.71772
$n_{1060.0}$	1060.0	1.72659
n_t	1014.0	1.72773
n_s	852.1	1.73272
n_r	706.5	1.73972
n_C	656.3	1.74320
$n_{C'}$	643.8	1.74419
$n_{632.8}$	632.8	1.74511
n_D	589.3	1.74931
n_d	587.6	1.74950
n_e	546.1	1.75459
n_F	486.1	1.76472
$n_{F'}$	480.0	1.76602
n_g	435.8	1.77741
n_h	404.7	1.78854
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.740287640
B_2	0.226710554
B_3	1.325255480
C_1	0.010792558
C_2	0.0538626639
C_3	106.26866500

Constants of Formula for dn/dT

D_0	9.21E-07
D_1	1.10E-08
D_2	-1.75E-11
E_0	7.67E-07
E_1	1.10E-09
λ_{TK} [µm]	0.264

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.670	0.370
2325	0.860	0.680
1970	0.969	0.920
1530	0.995	0.987
1060	0.998	0.996
700	0.997	0.993
660	0.997	0.992
620	0.997	0.992
580	0.996	0.990
546	0.994	0.985
500	0.988	0.971
460	0.977	0.940
436	0.965	0.910
420	0.950	0.870
405	0.920	0.810
400	0.910	0.780
390	0.860	0.680
380	0.770	0.520
370	0.570	0.250
365	0.380	0.090
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2317
$P_{C,s}$	0.4870
$P_{d,C}$	0.2928
$P_{e,d}$	0.2366
$P_{g,F}$	0.5894
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2284
$P'_{C',s}$	0.5254
$P'_{d,C'}$	0.2434
$P'_{e,d}$	0.2333
$P'_{g,F'}$	0.5218
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0085
$\Delta P_{C,s}$	0.0029
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	0.0042
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	2
SR	51.3
AR	1.2
PR	1.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	568
$T_{10^{13}}$ [°C]	563
$T_{10^{7.6}}$ [°C]	669
c_p [J/(g*K)]	0.620
λ [W/(m•K)]	0.830
ρ [g/cm³]	3.73
E [10^3 N/mm²]	96
µ	0.271
K [10^{-6} mm²/N]	2.57
$HK_{0.1/20}$	530
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.5	3.9	5.6	0.2	1.5	3.1
+20/+40	2.6	4.3	6.3	1.1	2.7	4.7
+60/+80	2.7	4.6	6.8	1.6	3.4	5.6

Datasheet

SCHOTT
glass made of ideas

N-LAF21
788475.428

n_d = 1.78800	ν_d = 47.49	$n_F - n_C$ = 0.016593
n_e = 1.79195	ν_e = 47.25	$n_{F'} - n_{C'}$ = 0.016761

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74419
$n_{1970.1}$	1970.1	1.75191
$n_{1529.6}$	1529.6	1.76014
$n_{1060.0}$	1060.0	1.76892
n_t	1014.0	1.76995
n_s	852.1	1.77434
n_r	706.5	1.78019
n_C	656.3	1.78301
$n_{C'}$	643.8	1.78380
$n_{632.8}$	632.8	1.78454
n_D	589.3	1.78785
n_d	587.6	1.78800
n_e	546.1	1.79195
n_F	486.1	1.79960
$n_{F'}$	480.0	1.80056
n_g	435.8	1.80882
n_h	404.7	1.81657
n_i	365.0	1.83002
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.871345290
B_2	0.250783010
B_3	1.220486390
C_1	0.009333223
C_2	0.0345637762
C_3	83.24048660

Constants of Formula for dn/dT

D_0	3.11E-06
D_1	1.13E-08
D_2	-2.07E-11
E_0	5.88E-07
E_1	6.32E-10
λ_{TK} [µm]	0.199

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.430	0.120
2325	0.710	0.430
1970	0.940	0.860
1530	0.988	0.971
1060	0.998	0.996
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.997	0.992
546	0.997	0.993
500	0.996	0.989
460	0.990	0.976
436	0.985	0.964
420	0.981	0.952
405	0.971	0.930
400	0.966	0.920
390	0.950	0.880
380	0.920	0.810
370	0.870	0.710
365	0.830	0.630
350	0.640	0.330
334	0.280	0.040
320	0.030	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/32

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2646
$P_{C,s}$	0.5222
$P_{d,C}$	0.3009
$P_{e,d}$	0.2380
$P_{g,F}$	0.5555
$P_{i,h}$	0.8106

Relative Partial Dispersion P'

$P'_{s,t}$	0.2619
$P'_{C',s}$	0.5641
$P'_{d,C'}$	0.2507
$P'_{e,d}$	0.2356
$P'_{g,F'}$	0.4927
$P'_{i,h}$	0.8025

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0165
$\Delta P_{C,s}$	0.0086
$\Delta P_{F,e}$	-0.0024
$\Delta P_{g,F}$	-0.0084
$\Delta P_{i,g}$	-0.0481

Chemical Properties

CR	1
FR	1
SR	51.3
AR	1
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	653
$T_{10^{13}}$ [°C]	659
$T_{10^{7.6}}$ [°C]	729
c_p [J/(g*K)]	0.550
λ [W/(m•K)]	0.830
ρ [g/cm³]	4.28
E [10^3 N/mm²]	124
µ	0.295
K [10^{-6} mm²/N]	1.46
$HK_{0.1/20}$	730
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.8	4.8	5.8	1.4	2.4	3.3
+20/+40	3.9	5.1	6.2	2.3	3.5	4.6
+60/+80	4.0	5.3	6.5	2.8	4.1	5.3

Datasheet

SCHOTT
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N-LAF33
786441.436

n_d = 1.78582	ν_d = 44.05	$n_F - n_C$ = 0.017839
n_e = 1.79007	ν_e = 43.80	$n_{F'} - n_{C'}$ = 0.018038

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74262
$n_{1970.1}$	1970.1	1.74968
$n_{1529.6}$	1529.6	1.75732
$n_{1060.0}$	1060.0	1.76584
n_t	1014.0	1.76689
n_s	852.1	1.77138
n_r	706.5	1.77751
n_C	656.3	1.78049
$n_{C'}$	643.8	1.78134
$n_{632.8}$	632.8	1.78213
n_D	589.3	1.78567
n_d	587.6	1.78582
n_e	546.1	1.79007
n_F	486.1	1.79833
$n_{F'}$	480.0	1.79937
n_g	435.8	1.80837
n_h	404.7	1.81687
n_i	365.0	1.83175
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.796534170
B_2	0.311577903
B_3	1.159818630
C_1	0.009273135
C_2	0.0358201181
C_3	87.34487120

Constants of Formula for dn/dT

D_0	8.17E-06
D_1	1.24E-08
D_2	-1.65E-11
E_0	7.11E-07
E_1	8.59E-10
λ_{TK} [µm]	0.210

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.470	0.150
2325	0.740	0.480
1970	0.950	0.870
1530	0.990	0.974
1060	0.999	0.998
700	0.998	0.996
660	0.998	0.995
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.995	0.988
460	0.989	0.973
436	0.983	0.959
420	0.978	0.950
405	0.968	0.920
400	0.963	0.910
390	0.950	0.870
380	0.920	0.810
370	0.870	0.710
365	0.840	0.650
350	0.690	0.400
334	0.380	0.090
320	0.080	0.000
310	0.000	0.000
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/32

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2520
$P_{C,s}$	0.5107
$P_{d,C}$	0.2988
$P_{e,d}$	0.2378
$P_{g,F}$	0.5626
$P_{i,h}$	0.8339

Relative Partial Dispersion P'

$P'_{s,t}$	0.2492
$P'_{C',s}$	0.5518
$P'_{d,C'}$	0.2488
$P'_{e,d}$	0.2351
$P'_{g,F'}$	0.4987
$P'_{i,h}$	0.8247

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0088
$\Delta P_{C,s}$	0.0052
$\Delta P_{F,e}$	-0.0018
$\Delta P_{g,F}$	-0.0071
$\Delta P_{i,g}$	-0.0443

Chemical Properties

CR	1
FR	2
SR	52.2
AR	1
PR	3
SR-J	6
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.7
T_g [°C]	600
$T_{10^{13}}$ [°C]	585
$T_{10^{7.6}}$ [°C]	673
c_p [J/(g*K)]	0.570
λ [W/(m•K)]	0.800
AT [°C]	628
ρ [g/cm^3]	4.36
E [10^3 N/mm^2]	111
µ	0.301
K [10^{-6} mm^2/N]	2.21
$HK_{0.1/20}$	730
HG	1
Abrasion Aa	67

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.8	8.1	9.4	4.4	5.7	7.0
+20/+40	7.0	8.5	10.0	5.5	6.9	8.4
+60/+80	7.2	8.9	10.5	6.0	7.6	9.3

Datasheet

SCHOTT
glass made of ideas

N-LAF34
773496.424

n_d = 1.77250	ν_d = 49.62	$n_F - n_C$ = 0.015568
n_e = 1.77621	ν_e = 49.38	$n_{F'} - n_{C'}$ = 0.015719

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.73085
$n_{1970.1}$	1970.1	1.73824
$n_{1529.6}$	1529.6	1.74610
$n_{1060.0}$	1060.0	1.75447
n_t	1014.0	1.75546
n_s	852.1	1.75962
n_r	706.5	1.76515
n_C	656.3	1.76780
$n_{C'}$	643.8	1.76855
$n_{632.8}$	632.8	1.76924
n_D	589.3	1.77236
n_d	587.6	1.77250
n_e	546.1	1.77621
n_F	486.1	1.78337
$n_{F'}$	480.0	1.78427
n_g	435.8	1.79196
n_h	404.7	1.79915
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.758369580
B_2	0.313537785
B_3	1.189252310
C_1	0.008728100
C_2	0.0293020832
C_3	85.17806440

Constants of Formula for dn/dT

D_0	3.89E-06
D_1	1.02E-08
D_2	-1.91E-11
E_0	5.88E-07
E_1	7.57E-10
λ_{TK} [µm]	0.181

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.450	0.140
2325	0.730	0.450
1970	0.950	0.870
1530	0.989	0.973
1060	0.999	0.998
700	0.998	0.996
660	0.998	0.996
620	0.998	0.995
580	0.998	0.995
546	0.998	0.996
500	0.997	0.993
460	0.994	0.986
436	0.991	0.978
420	0.988	0.971
405	0.983	0.958
400	0.980	0.950
390	0.971	0.930
380	0.955	0.890
370	0.930	0.830
365	0.910	0.790
350	0.820	0.600
334	0.640	0.330
320	0.420	0.120
310	0.240	0.030
300	0.070	0.000
290	0.000	
280		
270		
260		
250		

Color Code

λ80 / λ5	38/30

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2674
$P_{C,s}$	0.5256
$P_{d,C}$	0.3018
$P_{e,d}$	0.2382
$P_{g,F}$	0.5518
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2648
$P'_{C',s}$	0.5679
$P'_{d,C'}$	0.2515
$P'_{e,d}$	0.2359
$P'_{g,F'}$	0.4895
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0126
$\Delta P_{C,s}$	0.0070
$\Delta P_{F,e}$	-0.0023
$\Delta P_{g,F}$	-0.0085
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	1
SR	51.3
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.0
T_g [°C]	668
$T_{10^{13}}$ [°C]	659
$T_{10^{7.6}}$ [°C]	745
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.800
ρ [g/cm³]	4.24
E [10^3 N/mm²]	123
µ	0.292
K [10^{-6} mm²/N]	1.44
$HK_{0.1/20}$	770
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.2	5.2	6.2	1.9	2.8	3.7
+20/+40	4.3	5.4	6.5	2.7	3.9	4.9
+60/+80	4.4	5.6	6.8	3.2	4.4	5.5

Datasheet

SCHOTT
glass made of ideas

P-LAF37
755457.399

n_d = 1.75550	ν_d = 45.66	$n_F - n_C$ = 0.016546
n_e = 1.75944	ν_e = 45.42	$n_{F'} - n_{C'}$ = 0.016722

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.71338
$n_{1970.1}$	1970.1	1.72058
$n_{1529.6}$	1529.6	1.72830
$n_{1060.0}$	1060.0	1.73669
n_t	1014.0	1.73770
n_s	852.1	1.74198
n_r	706.5	1.74775
n_C	656.3	1.75054
$n_{C'}$	643.8	1.75132
$n_{632.8}$	632.8	1.75206
n_D	589.3	1.75535
n_d	587.6	1.75550
n_e	546.1	1.75944
n_F	486.1	1.76708
$n_{F'}$	480.0	1.76804
n_g	435.8	1.77633
n_h	404.7	1.78414
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.760032440
B_2	0.248286745
B_3	1.159351220
C_1	0.009380064
C_2	0.0360537464
C_3	86.43246930

Constants of Formula for dn/dT

D_0	7.03E-06
D_1	1.15E-08
D_2	7.48E-13
E_0	7.25E-07
E_1	8.36E-10
λ_{TK} [µm]	0.206

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.56	0.23
2325	0.81	0.60
1970	0.968	0.92
1530	0.997	0.991
1060	0.999	0.998
700	0.999	0.997
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.992
460	0.993	0.982
436	0.989	0.973
420	0.986	0.965
405	0.979	0.95
400	0.976	0.94
390	0.965	0.91
380	0.94	0.86
370	0.90	0.78
365	0.87	0.71
350	0.73	0.45
334	0.46	0.15
320	0.18	0.01
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/31

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2591
$P_{C,s}$	0.5170
$P_{d,C}$	0.2999
$P_{e,d}$	0.2379
$P_{g,F}$	0.5590
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2563
$P'_{C',s}$	0.5585
$P'_{d,C'}$	0.2498
$P'_{e,d}$	0.2354
$P'_{g,F'}$	0.4957
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0145
$\Delta P_{C,s}$	0.0077
$\Delta P_{F,e}$	-0.0022
$\Delta P_{g,F}$	-0.0080
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	3
SR	52.3
AR	1
PR	3
SR-J	4
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.8
T_g [°C]	506
$T_{10^{13}}$ [°C]	510
$T_{10^{7.6}}$ [°C]	593
c_p [J/(g*K)]	0.640
λ [W/(m•K)]	0.900
AT [°C]	546
ρ [g/cm³]	3.99
E [10^3 N/mm²]	115
µ	0.296
K [10^{-6} mm²/N]	2.26
$HK_{0.1/20}$	697
Abrasion Aa	67

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.1	7.4	8.7	3.8	5.0	6.2
+20/+40	6.1	7.6	9.0	4.6	6.1	7.5
+60/+80	6.4	8.0	9.5	5.2	6.8	8.3

Datasheet

SCHOTT
glass made of ideas

LASF35
022291.541

n_d = 2.02204	ν_d = 29.06	$n_F - n_C$ = 0.035170
n_e = 2.03035	ν_e = 28.84	$n_{F'} - n_{C'}$ = 0.035721

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.95946
$n_{1970.1}$	1970.1	1.96639
$n_{1529.6}$	1529.6	1.97472
$n_{1060.0}$	1060.0	1.98624
n_t	1014.0	1.98786
n_s	852.1	1.99531
n_r	706.5	2.00628
n_C	656.3	2.01185
$n_{C'}$	643.8	2.01343
$n_{632.8}$	632.8	2.01493
n_D	589.3	2.02173
n_d	587.6	2.02204
n_e	546.1	2.03035
n_F	486.1	2.04702
$n_{F'}$	480.0	2.04916
n_g	435.8	2.06805
n_h	404.7	2.08663
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.455058610
B_2	0.453006077
B_3	2.385130800
C_1	0.013567040
C_2	0.0545803020
C_3	167.90471500

Constants of Formula for dn/dT

D_0	1.43E-07
D_1	8.71E-09
D_2	-2.71E-11
E_0	1.02E-06
E_1	1.50E-09
λ_{TK} [µm]	0.263

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.790	0.550
2325	0.880	0.720
1970	0.973	0.930
1530	0.995	0.987
1060	0.998	0.994
700	0.992	0.981
660	0.990	0.974
620	0.987	0.969
580	0.985	0.962
546	0.977	0.940
500	0.950	0.870
460	0.900	0.770
436	0.850	0.670
420	0.790	0.550
405	0.690	0.390
400	0.630	0.320
390	0.500	0.180
380	0.300	0.050
370	0.100	0.000
365	0.030	
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	45/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2118
$P_{C,s}$	0.4701
$P_{d,C}$	0.2899
$P_{e,d}$	0.2364
$P_{g,F}$	0.5982
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2086
$P'_{C',s}$	0.5073
$P'_{d,C'}$	0.2409
$P'_{e,d}$	0.2327
$P'_{g,F'}$	0.5291
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0009
$\Delta P_{C,s}$	-0.0006
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0033
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1.3
AR	1
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.5
T_g [°C]	774
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	
c_p [J/(g*K)]	0.445
λ [W/(m•K)]	0.920
ρ [g/cm³]	5.41
E [10^3 N/mm²]	132
µ	0.303
K [10^{-6} mm²/N]	0.73
$HK_{0.1/20}$	810
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.6	5.0	7.8	-0.1	2.2	5.0
+20/+40	2.7	5.5	9.0	1.0	3.8	7.1
+60/+80	2.8	5.9	9.7	1.4	4.5	8.3

Datasheet

SCHOTT
glass made of ideas

N-LASF9
850322.441

n_d = 1.85025	ν_d = 32.17	$n_F - n_C$ = 0.026430
n_e = 1.85650	ν_e = 31.93	$n_{F'} - n_{C'}$ = 0.026827

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.80058
$n_{1970.1}$	1970.1	1.80659
$n_{1529.6}$	1529.6	1.81364
$n_{1060.0}$	1060.0	1.82293
n_t	1014.0	1.82420
n_s	852.1	1.82997
n_r	706.5	1.83834
n_C	656.3	1.84255
$n_{C'}$	643.8	1.84376
$n_{632.8}$	632.8	1.84489
n_D	589.3	1.85002
n_d	587.6	1.85025
n_e	546.1	1.85650
n_F	486.1	1.86898
$n_{F'}$	480.0	1.87058
n_g	435.8	1.88467
n_h	404.7	1.89845
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.000295470
B_2	0.298926886
B_3	1.806918430
C_1	0.012142602
C_2	0.0538736236
C_3	156.53082900

Constants of Formula for dn/dT

D_0	1.05E-06
D_1	1.02E-08
D_2	-2.38E-11
E_0	9.19E-07
E_1	1.18E-09
λ_{TK} [µm]	0.257

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.600
2325	0.870	0.710
1970	0.967	0.920
1530	0.994	0.986
1060	0.998	0.994
700	0.994	0.986
660	0.992	0.981
620	0.992	0.979
580	0.991	0.978
546	0.989	0.972
500	0.978	0.950
460	0.958	0.900
436	0.930	0.840
420	0.900	0.770
405	0.830	0.630
400	0.800	0.570
390	0.690	0.400
380	0.530	0.200
370	0.270	0.040
365	0.140	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	41/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2181
$P_{C,s}$	0.4762
$P_{d,C}$	0.2912
$P_{e,d}$	0.2366
$P_{g,F}$	0.5934
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2149
$P'_{C',s}$	0.5140
$P'_{d,C'}$	0.2420
$P'_{e,d}$	0.2330
$P'_{g,F'}$	0.5250
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0032
$\Delta P_{C,s}$	-0.0016
$\Delta P_{F,e}$	0.0008
$\Delta P_{g,F}$	0.0037
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	683
$T_{10^{13}}$ [°C]	700
$T_{10^{7.6}}$ [°C]	817
c_p [J/(g*K)]	0.530
λ [W/(m•K)]	0.790
ρ [g/cm³]	4.41
E [10^3 N/mm²]	109
µ	0.288
K [10^{-6} mm²/N]	1.72
$HK_{0.1/20}$	515
HG	4
Abrasion Aa	120

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.8	4.7	6.9	0.4	2.2	4.3
+20/+40	2.9	5.1	7.7	1.4	3.5	6.0
+60/+80	3.1	5.5	8.2	1.8	4.2	6.9

Datasheet

N-LASF9HT
850322.441

n_d = 1.85025	ν_d = 32.17	$n_F - n_C$ = 0.026430
n_e = 1.85650	ν_e = 31.93	$n_{F'} - n_{C'}$ = 0.026827

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.80058
$n_{1970.1}$	1970.1	1.80659
$n_{1529.6}$	1529.6	1.81364
$n_{1060.0}$	1060.0	1.82293
n_t	1014.0	1.82420
n_s	852.1	1.82997
n_r	706.5	1.83834
n_C	656.3	1.84255
$n_{C'}$	643.8	1.84376
$n_{632.8}$	632.8	1.84489
n_D	589.3	1.85002
n_d	587.6	1.85025
n_e	546.1	1.85650
n_F	486.1	1.86898
$n_{F'}$	480.0	1.87058
n_g	435.8	1.88467
n_h	404.7	1.89845
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.000295470
B_2	0.298926886
B_3	1.806918430
C_1	0.012142602
C_2	0.0538736236
C_3	156.53082900

Constants of Formula for dn/dT

D_0	1.05E-06
D_1	1.02E-08
D_2	-2.38E-11
E_0	9.19E-07
E_1	1.18E-09
λ_{TK} [µm]	0.257

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.600
2325	0.870	0.710
1970	0.967	0.920
1530	0.994	0.986
1060	0.998	0.994
700	0.994	0.986
660	0.992	0.981
620	0.992	0.979
580	0.991	0.978
546	0.989	0.972
500	0.978	0.950
460	0.958	0.900
436	0.940	0.860
420	0.920	0.800
405	0.870	0.700
400	0.840	0.650
390	0.770	0.510
380	0.630	0.310
370	0.390	0.100
365	0.250	0.030
350	0.010	0.000
334	0.000	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	40/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2181
$P_{C,s}$	0.4762
$P_{d,C}$	0.2912
$P_{e,d}$	0.2366
$P_{g,F}$	0.5934
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2149
$P'_{C',s}$	0.5140
$P'_{d,C'}$	0.2420
$P'_{e,d}$	0.2330
$P'_{g,F'}$	0.5250
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0032
$\Delta P_{C,s}$	-0.0016
$\Delta P_{F,e}$	0.0008
$\Delta P_{g,F}$	0.0037
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	683
$T_{10^{13}}$ [°C]	700
$T_{10^{7.6}}$ [°C]	817
c_p [J/(g*K)]	0.530
λ [W/(m•K)]	0.790
ρ [g/cm³]	4.41
E [10^3 N/mm²]	109
µ	0.288
K [10^{-6} mm²/N]	1.72
$HK_{0.1/20}$	515
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.8	4.7	6.9	0.4	2.2	4.3
+20/+40	2.9	5.1	7.7	1.4	3.5	6.0
+60/+80	3.1	5.5	8.2	1.8	4.2	6.9

Datasheet

SCHOTT
glass made of ideas

N-LASF31A
883408.551

n_d = 1.88300	ν_d = 40.76	$n_F - n_C$ = 0.021663
n_e = 1.88815	ν_e = 40.52	$n_{F'} - n_{C'}$ = 0.021921

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.83590
$n_{1970.1}$	1970.1	1.84267
$n_{1529.6}$	1529.6	1.85026
$n_{1060.0}$	1060.0	1.85937
n_t	1014.0	1.86054
n_s	852.1	1.86572
n_r	706.5	1.87298
n_C	656.3	1.87656
$n_{C'}$	643.8	1.87757
$n_{632.8}$	632.8	1.87853
n_D	589.3	1.88281
n_d	587.6	1.88300
n_e	546.1	1.88815
n_F	486.1	1.89822
$n_{F'}$	480.0	1.89950
n_g	435.8	1.91050
n_h	404.7	1.92093
n_i	365.0	1.93920
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.964850750
B_2	0.475231259
B_3	1.483601090
C_1	0.009820602
C_2	0.0344713438
C_3	110.73986300

Constants of Formula for dn/dT

D_0	1.67E-06
D_1	8.90E-09
D_2	-8.73E-12
E_0	7.47E-07
E_1	7.46E-10
λ_{TK} [µm]	0.207

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.640	0.320
2325	0.820	0.620
1970	0.963	0.910
1530	0.993	0.983
1060	0.998	0.995
700	0.997	0.992
660	0.996	0.991
620	0.996	0.990
580	0.996	0.990
546	0.996	0.990
500	0.991	0.978
460	0.980	0.950
436	0.970	0.930
420	0.960	0.900
405	0.940	0.860
400	0.930	0.840
390	0.910	0.780
380	0.860	0.690
370	0.780	0.540
365	0.730	0.450
350	0.490	0.170
334	0.130	0.010
320	0.060	0.000
310	0.000	
300	0.000	
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	38/33

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2391
$P_{C,s}$	0.5004
$P_{d,C}$	0.2972
$P_{e,d}$	0.2377
$P_{g,F}$	0.5667
$P_{i,h}$	0.8436

Relative Partial Dispersion P'

$P'_{s,t}$	0.2363
$P'_{C',s}$	0.5407
$P'_{d,C'}$	0.2475
$P'_{e,d}$	0.2349
$P'_{g,F'}$	0.5021
$P'_{i,h}$	0.8337

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0012
$\Delta P_{C,s}$	0.0025
$\Delta P_{F,e}$	-0.0019
$\Delta P_{g,F}$	-0.0085
$\Delta P_{i,g}$	-0.0575

Chemical Properties

CR	1
FR	0
SR	2.3
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.7
T_g [°C]	719
$T_{10^{13}}$ [°C]	720
$T_{10^{7.6}}$ [°C]	830
c_p [J/(g*K)]	0.440
λ [W/(m•K)]	0.790
ρ [g/cm³]	5.51
E [10^3 N/mm²]	126
µ	0.301
K [10^{-6} mm²/N]	1.18
$HK_{0.1/20}$	650
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.4	4.8	6.3	0.9	2.3	3.7
+20/+40	3.3	4.9	6.6	1.7	3.3	4.9
+60/+80	3.4	5.2	6.9	2.2	3.9	5.6

Datasheet

SCHOTT
glass made of ideas

N-LASF40
834373.443

n_d = 1.83404	ν_d = 37.30	$n_F - n_C$ = 0.022363
n_e = 1.83935	ν_e = 37.04	$n_{F'} - n_{C'}$ = 0.022658

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78600
$n_{1970.1}$	1970.1	1.79298
$n_{1529.6}$	1529.6	1.80074
$n_{1060.0}$	1060.0	1.80999
n_t	1014.0	1.81118
n_s	852.1	1.81643
n_r	706.5	1.82380
n_C	656.3	1.82745
$n_{C'}$	643.8	1.82849
$n_{632.8}$	632.8	1.82946
n_D	589.3	1.83385
n_d	587.6	1.83404
n_e	546.1	1.83935
n_F	486.1	1.84981
$n_{F'}$	480.0	1.85114
n_g	435.8	1.86275
n_h	404.7	1.87393
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.985503310
B_2	0.274057042
B_3	1.289456610
C_1	0.010958331
C_2	0.0474551603
C_3	96.90852860

Constants of Formula for dn/dT

D_0	8.10E-06
D_1	1.25E-08
D_2	-1.73E-11
E_0	8.27E-07
E_1	1.08E-09
λ_{TK} [µm]	0.238

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.570	0.240
2325	0.810	0.590
1970	0.963	0.910
1530	0.993	0.982
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.994
620	0.997	0.993
580	0.997	0.992
546	0.995	0.988
500	0.987	0.969
460	0.973	0.930
436	0.954	0.890
420	0.940	0.850
405	0.910	0.780
400	0.890	0.750
390	0.840	0.650
380	0.760	0.510
370	0.600	0.280
365	0.470	0.150
350	0.040	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	39/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2346
$P_{C,s}$	0.4929
$P_{d,C}$	0.2948
$P_{e,d}$	0.2371
$P_{g,F}$	0.5786
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2315
$P'_{C',s}$	0.5321
$P'_{d,C'}$	0.2453
$P'_{e,d}$	0.2340
$P'_{g,F'}$	0.5124
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0055
$\Delta P_{C,s}$	0.0030
$\Delta P_{F,e}$	-0.0007
$\Delta P_{g,F}$	-0.0024
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	1
SR	51.2
AR	1
PR	1.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.9
T_g [°C]	590
$T_{10^{13}}$ [°C]	591
$T_{10^{7.6}}$ [°C]	677
c_p [J/(g*K)]	0.550
λ [W/(m•K)]	0.810
ρ [g/cm³]	4.43
E [10^3 N/mm²]	111
µ	0.304
K [10^{-6} mm²/N]	2.19
$HK_{0.1/20}$	580
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	7.1	8.8	10.6	4.6	6.3	8.0
+20/+40	7.3	9.3	11.4	5.7	7.7	9.8
+60/+80	7.6	9.7	12.0	6.3	8.5	10.8

Datasheet

SCHOTT
glass made of ideas

N-LASF41
835431.485

n_d = 1.83501	ν_d = 43.13	$n_F - n_C$ = 0.019361
n_e = 1.83961	ν_e = 42.88	$n_{F'} - n_{C'}$ = 0.019578

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78859
$n_{1970.1}$	1970.1	1.79608
$n_{1529.6}$	1529.6	1.80423
$n_{1060.0}$	1060.0	1.81338
n_t	1014.0	1.81450
n_s	852.1	1.81936
n_r	706.5	1.82599
n_C	656.3	1.82923
$n_{C'}$	643.8	1.83014
$n_{632.8}$	632.8	1.83100
n_D	589.3	1.83484
n_d	587.6	1.83501
n_e	546.1	1.83961
n_F	486.1	1.84859
$n_{F'}$	480.0	1.84972
n_g	435.8	1.85949
n_h	404.7	1.86872
n_i	365.0	1.88486
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.863483310
B_2	0.413307255
B_3	1.357848150
C_1	0.009103682
C_2	0.0339247268
C_3	93.35805950

Constants of Formula for dn/dT

D_0	3.03E-06
D_1	1.04E-08
D_2	-1.30E-11
E_0	6.62E-07
E_1	7.82E-10
λ_{TK} [µm]	0.209

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.480	0.160
2325	0.760	0.510
1970	0.950	0.880
1530	0.993	0.983
1060	0.998	0.995
700	0.998	0.995
660	0.998	0.994
620	0.997	0.993
580	0.998	0.994
546	0.997	0.993
500	0.994	0.984
460	0.985	0.962
436	0.976	0.940
420	0.967	0.920
405	0.954	0.890
400	0.950	0.880
390	0.930	0.830
380	0.890	0.750
370	0.830	0.630
365	0.790	0.550
350	0.590	0.270
334	0.290	0.040
320	0.040	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	37/32

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2508
$P_{C,s}$	0.5098
$P_{d,C}$	0.2986
$P_{e,d}$	0.2378
$P_{g,F}$	0.5629
$P_{i,h}$	0.8338

Relative Partial Dispersion P'

$P'_{s,t}$	0.2480
$P'_{C',s}$	0.5507
$P'_{d,C'}$	0.2487
$P'_{e,d}$	0.2351
$P'_{g,F'}$	0.4989
$P'_{i,h}$	0.8245

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0110
$\Delta P_{C,s}$	0.0063
$\Delta P_{F,e}$	-0.0021
$\Delta P_{g,F}$	-0.0083
$\Delta P_{i,g}$	-0.0520

Chemical Properties

CR	1
FR	1
SR	4
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.3
T_g [°C]	651
$T_{10^{13}}$ [°C]	658
$T_{10^{7.6}}$ [°C]	739
c_p [J/(g*K)]	0.490
λ [W/(m•K)]	0.790
ρ [g/cm³]	4.85
E [10^3 N/mm²]	124
µ	0.294
K [10^{-6} mm²/N]	1.57
$HK_{0.1/20}$	760
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.0	5.2	6.4	1.5	2.7	3.9
+20/+40	4.0	5.4	6.8	2.4	3.8	5.2
+60/+80	4.2	5.7	7.2	2.9	4.5	6.0

Datasheet

N-LASF43
806406.426

n_d = 1.80610	ν_d = 40.61	$n_F - n_C$ = 0.019850
n_e = 1.81081	ν_e = 40.36	$n_{F'} - n_{C'}$ = 0.020089

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75901
$n_{1970.1}$	1970.1	1.76662
$n_{1529.6}$	1529.6	1.77488
$n_{1060.0}$	1060.0	1.78413
n_t	1014.0	1.78527
n_s	852.1	1.79018
n_r	706.5	1.79691
n_C	656.3	1.80020
$n_{C'}$	643.8	1.80113
$n_{632.8}$	632.8	1.80200
n_D	589.3	1.80593
n_d	587.6	1.80610
n_e	546.1	1.81081
n_F	486.1	1.82005
$n_{F'}$	480.0	1.82122
n_g	435.8	1.83137
n_h	404.7	1.84106
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.935028270
B_2	0.236629350
B_3	1.262913440
C_1	0.010400141
C_2	0.0447505292
C_3	87.43756900

Constants of Formula for dn/dT

D_0	4.77E-06
D_1	1.14E-08
D_2	-2.68E-12
E_0	6.62E-07
E_1	8.84E-10
λ_{TK} [µm]	0.234

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.400	0.100
2325	0.710	0.430
1970	0.940	0.850
1530	0.984	0.960
1060	0.998	0.994
700	0.998	0.995
660	0.998	0.995
620	0.997	0.993
580	0.996	0.991
546	0.995	0.988
500	0.990	0.975
460	0.980	0.950
436	0.967	0.920
420	0.954	0.890
405	0.930	0.840
400	0.920	0.810
390	0.880	0.730
380	0.820	0.610
370	0.710	0.420
365	0.620	0.300
350	0.220	0.020
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/34

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2476
$P_{C,s}$	0.5049
$P_{d,C}$	0.2972
$P_{e,d}$	0.2374
$P_{g,F}$	0.5703
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2446
$P'_{C',s}$	0.5452
$P'_{d,C'}$	0.2473
$P'_{e,d}$	0.2346
$P'_{g,F'}$	0.5053
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0149
$\Delta P_{C,s}$	0.0073
$\Delta P_{F,e}$	-0.0016
$\Delta P_{g,F}$	-0.0052
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	1
SR	51.3
AR	1
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.7
T_g [°C]	614
$T_{10^{13}}$ [°C]	615
$T_{10^{7.6}}$ [°C]	699
c_p [J/(g*K)]	0.550
λ [W/(m•K)]	0.810
ρ [g/cm³]	4.26
E [10^3 N/mm²]	114
µ	0.290
K [10^{-6} mm²/N]	1.92
$HK_{0.1/20}$	720
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.9	6.2	7.6	2.5	3.8	5.0
+20/+40	5.0	6.5	8.1	3.4	4.9	6.4
+60/+80	5.2	6.9	8.6	4.0	5.6	7.4

Datasheet

SCHOTT
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N-LASF44
804465.444

n_d = 1.80420	ν_d = 46.50	$n_F - n_C$ = 0.017294
n_e = 1.80832	ν_e = 46.25	$n_{F'} - n_{C'}$ = 0.017476

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.76070
$n_{1970.1}$	1970.1	1.76801
$n_{1529.6}$	1529.6	1.77590
$n_{1060.0}$	1060.0	1.78455
n_t	1014.0	1.78560
n_s	852.1	1.79006
n_r	706.5	1.79609
n_C	656.3	1.79901
$n_{C'}$	643.8	1.79983
$n_{632.8}$	632.8	1.80060
n_D	589.3	1.80405
n_d	587.6	1.80420
n_e	546.1	1.80832
n_F	486.1	1.81630
$n_{F'}$	480.0	1.81731
n_g	435.8	1.82594
n_h	404.7	1.83405
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.788971050
B_2	0.386758670
B_3	1.305062430
C_1	0.008725063
C_2	0.0308085023
C_3	92.77438240

Constants of Formula for dn/dT

D_0	3.32E-06
D_1	1.12E-08
D_2	-8.52E-12
E_0	5.88E-07
E_1	7.13E-10
λ_{TK} [µm]	0.209

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.470	0.150
2325	0.740	0.470
1970	0.950	0.870
1530	0.990	0.975
1060	0.998	0.995
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.996	0.989
460	0.991	0.977
436	0.986	0.965
420	0.980	0.950
405	0.967	0.920
400	0.963	0.910
390	0.950	0.870
380	0.910	0.790
370	0.860	0.690
365	0.820	0.620
350	0.660	0.350
334	0.380	0.090
320	0.150	
310	0.070	
300	0.030	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/31

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2582
$P_{C,s}$	0.5171
$P_{d,C}$	0.3002
$P_{e,d}$	0.2380
$P_{g,F}$	0.5572
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2555
$P'_{C',s}$	0.5588
$P'_{d,C'}$	0.2501
$P'_{e,d}$	0.2355
$P'_{g,F'}$	0.4941
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0098
$\Delta P_{C,s}$	0.0058
$\Delta P_{F,e}$	-0.0021
$\Delta P_{g,F}$	-0.0084
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	1
SR	4
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	655
$T_{10^{13}}$ [°C]	659
$T_{10^{7.6}}$ [°C]	742
c_p [J/(g*K)]	0.530
λ [W/(m•K)]	0.820
ρ [g/cm³]	4.44
E [10^3 N/mm²]	124
µ	0.293
K [10^{-6} mm²/N]	1.41
$HK_{0.1/20}$	770
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.0	5.1	6.1	1.6	2.6	3.6
+20/+40	4.0	5.3	6.5	2.5	3.7	4.9
+60/+80	4.2	5.6	6.9	3.0	4.4	5.7

Datasheet

SCHOTT
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N-LASF45
801350.363

n_d = 1.80107	ν_d = 34.97	$n_F - n_C$ = 0.022905
n_e = 1.80650	ν_e = 34.72	$n_{F'} - n_{C'}$ = 0.023227

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75487
$n_{1970.1}$	1970.1	1.76104
$n_{1529.6}$	1529.6	1.76809
$n_{1060.0}$	1060.0	1.77689
n_t	1014.0	1.77805
n_s	852.1	1.78325
n_r	706.5	1.79066
n_C	656.3	1.79436
$n_{C'}$	643.8	1.79541
$n_{632.8}$	632.8	1.79640
n_D	589.3	1.80087
n_d	587.6	1.80107
n_e	546.1	1.80650
n_F	486.1	1.81726
$n_{F'}$	480.0	1.81864
n_g	435.8	1.83068
n_h	404.7	1.84237
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.871401980
B_2	0.267777879
B_3	1.730300080
C_1	0.011217192
C_2	0.0505134972
C_3	147.10650500

Constants of Formula for dn/dT

D_0	2.78E-06
D_1	8.73E-09
D_2	-2.65E-11
E_0	8.24E-07
E_1	1.15E-09
λ_{TK} [µm]	0.255

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.880	0.720
1970	0.972	0.930
1530	0.995	0.988
1060	0.999	0.997
700	0.996	0.990
660	0.995	0.987
620	0.994	0.984
580	0.994	0.986
546	0.993	0.982
500	0.983	0.958
460	0.965	0.920
436	0.950	0.870
420	0.920	0.820
405	0.880	0.720
400	0.860	0.680
390	0.790	0.550
380	0.670	0.370
370	0.480	0.150
365	0.340	0.060
350	0.010	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	44/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2268
$P_{C,s}$	0.4849
$P_{d,C}$	0.2930
$P_{e,d}$	0.2368
$P_{g,F}$	0.5859
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2237
$P'_{C',s}$	0.5235
$P'_{d,C'}$	0.2437
$P'_{e,d}$	0.2336
$P'_{g,F'}$	0.5186
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0009
$\Delta P_{C,s}$	0.0005
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0009
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	3.2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.6
T_g [°C]	647
$T_{10^{13}}$ [°C]	652
$T_{10^{7.6}}$ [°C]	773
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	1.020
ρ [g/cm³]	3.63
E [10^3 N/mm²]	116
µ	0.281
K [10^{-6} mm²/N]	2.01
$HK_{0.1/20}$	630
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.8	5.4	7.3	1.4	3.0	4.7
+20/+40	3.8	5.7	7.9	2.3	4.1	6.2
+60/+80	3.8	5.9	8.3	2.6	4.7	7.0

Datasheet

N-LASF45HT
801350.363

n_d = 1.80107 ν_d = 34.97 $n_F - n_C$ = 0.022905
n_e = 1.80650 ν_e = 34.72 $n_{F'} - n_{C'}$ = 0.023227

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75487
$n_{1970.1}$	1970.1	1.76104
$n_{1529.6}$	1529.6	1.76809
$n_{1060.0}$	1060.0	1.77689
n_t	1014.0	1.77805
n_s	852.1	1.78325
n_r	706.5	1.79066
n_C	656.3	1.79436
$n_{C'}$	643.8	1.79541
$n_{632.8}$	632.8	1.79640
n_D	589.3	1.80087
n_d	587.6	1.80107
n_e	546.1	1.80650
n_F	486.1	1.81726
$n_{F'}$	480.0	1.81864
n_g	435.8	1.83068
n_h	404.7	1.84237
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.871401980
B_2	0.267777879
B_3	1.730300080
C_1	0.011217192
C_2	0.0505134972
C_3	147.10650500

Constants of Formula for dn/dT

D_0	2.78E-06
D_1	8.73E-09
D_2	-2.65E-11
E_0	8.24E-07
E_1	1.15E-09
λ_{TK} [µm]	0.255

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.880	0.720
1970	0.972	0.930
1530	0.995	0.988
1060	0.999	0.997
700	0.996	0.990
660	0.995	0.987
620	0.994	0.986
580	0.994	0.986
546	0.993	0.983
500	0.985	0.964
460	0.972	0.930
436	0.958	0.900
420	0.940	0.860
405	0.910	0.780
400	0.890	0.740
390	0.830	0.620
380	0.720	0.440
370	0.530	0.200
365	0.400	0.100
350	0.030	0.000
334	0.000	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	43/35

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2268
$P_{C,s}$	0.4849
$P_{d,C}$	0.2930
$P_{e,d}$	0.2368
$P_{g,F}$	0.5859
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2237
$P'_{C',s}$	0.5235
$P'_{d,C'}$	0.2437
$P'_{e,d}$	0.2336
$P'_{g,F'}$	0.5186
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0009
$\Delta P_{C,s}$	0.0005
$\Delta P_{F,e}$	0.0001
$\Delta P_{g,F}$	0.0009
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	3.2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.6
T_g [°C]	647
$T_{10^{13}}$ [°C]	652
$T_{10^{7.6}}$ [°C]	773
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	1.020
ρ [g/cm³]	3.63
E [10^3 N/mm²]	116
µ	0.281
K [10^{-6} mm²/N]	2.01
$HK_{0.1/20}$	630
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.8	5.4	7.3	1.4	3.0	4.7
+20/+40	3.8	5.7	7.9	2.3	4.1	6.2
+60/+80	3.8	5.9	8.3	2.6	4.7	7.0

Datasheet

SCHOTT
glass made of ideas

N-LASF46A
904313.445

n_d = 1.90366	ν_d = 31.32	$n_F - n_C$ = 0.028853
n_e = 1.91048	ν_e = 31.09	$n_{F'} - n_{C'}$ = 0.029287

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.84576
$n_{1970.1}$	1970.1	1.85364
$n_{1529.6}$	1529.6	1.86255
$n_{1060.0}$	1060.0	1.87353
n_t	1014.0	1.87498
n_s	852.1	1.88143
n_r	706.5	1.89064
n_C	656.3	1.89526
$n_{C'}$	643.8	1.89657
$n_{632.8}$	632.8	1.89781
n_D	589.3	1.90341
n_d	587.6	1.90366
n_e	546.1	1.91048
n_F	486.1	1.92411
$n_{F'}$	480.0	1.92586
n_g	435.8	1.94129
n_h	404.7	1.95645
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.167015660
B_2	0.319812761
B_3	1.660044860
C_1	0.012359552
C_2	0.0560610282
C_3	107.04771800

Constants of Formula for dn/dT

D_0	3.53E-06
D_1	1.24E-08
D_2	-1.87E-11
E_0	8.39E-07
E_1	1.04E-09
λ_{TK} [µm]	0.275

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.560	0.230
2325	0.790	0.560
1970	0.954	0.890
1530	0.991	0.977
1060	0.999	0.997
700	0.996	0.989
660	0.994	0.985
620	0.993	0.983
580	0.993	0.982
546	0.991	0.978
500	0.980	0.950
460	0.959	0.900
436	0.940	0.850
420	0.910	0.780
405	0.850	0.660
400	0.820	0.600
390	0.710	0.420
380	0.500	0.180
370	0.180	0.010
365	0.050	0.000
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	41/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2236
$P_{C,s}$	0.4793
$P_{d,C}$	0.2912
$P_{e,d}$	0.2364
$P_{g,F}$	0.5953
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2203
$P'_{C',s}$	0.5170
$P'_{d,C'}$	0.2420
$P'_{e,d}$	0.2329
$P'_{g,F'}$	0.5268
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0094
$\Delta P_{C,s}$	0.0034
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	0.0042
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	3
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.2
T_g [°C]	638
$T_{10^{13}}$ [°C]	639
$T_{10^{7.6}}$ [°C]	733
c_p [J/(g*K)]	0.540
λ [W/(m•K)]	0.910
ρ [g/cm³]	4.45
E [10^3 N/mm²]	124
µ	0.298
K [10^{-6} mm²/N]	1.64
$HK_{0.1/20}$	666
HG	1
Abrasion Aa	88

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.4	6.4	8.8	1.9	3.8	6.1
+20/+40	4.7	7.0	9.8	3.1	5.3	8.1
+60/+80	5.0	7.4	10.5	3.7	6.1	9.2

Datasheet

SCHOTT
glass made of ideas

N-LASF46B
904313.451

n_d = 1.90366	ν_d = 31.32	$n_F - n_C$ = 0.028852
n_e = 1.91048	ν_e = 31.09	$n_{F'} - n_{C'}$ = 0.029289

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.84657
$n_{1970.1}$	1970.1	1.85418
$n_{1529.6}$	1529.6	1.86283
$n_{1060.0}$	1060.0	1.87362
n_t	1014.0	1.87505
n_s	852.1	1.88146
n_r	706.5	1.89065
n_C	656.3	1.89526
$n_{C'}$	643.8	1.89657
$n_{632.8}$	632.8	1.89781
n_D	589.3	1.90341
n_d	587.6	1.90366
n_e	546.1	1.91048
n_F	486.1	1.92411
$n_{F'}$	480.0	1.92586
n_g	435.8	1.94130
n_h	404.7	1.95647
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.179889220
B_2	0.306495184
B_3	1.568824370
C_1	0.012580538
C_2	0.0567191367
C_3	105.31653800

Constants of Formula for dn/dT

D_0	5.98E-06
D_1	1.30E-08
D_2	-3.50E-12
E_0	9.13E-07
E_1	1.24E-09
λ_{TK} [µm]	0.267

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.560	0.230
2325	0.790	0.550
1970	0.954	0.890
1530	0.991	0.977
1060	0.998	0.996
700	0.996	0.989
660	0.993	0.983
620	0.992	0.980
580	0.991	0.978
546	0.989	0.972
500	0.977	0.940
460	0.954	0.890
436	0.930	0.840
420	0.900	0.770
405	0.850	0.660
400	0.820	0.600
390	0.710	0.420
380	0.500	0.180
370	0.180	0.010
365	0.050	0.000
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	41/37

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2222
$P_{C,s}$	0.4783
$P_{d,C}$	0.2911
$P_{e,d}$	0.2364
$P_{g,F}$	0.5956
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2189
$P'_{C',s}$	0.5160
$P'_{d,C'}$	0.2419
$P'_{e,d}$	0.2329
$P'_{g,F'}$	0.5270
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0069
$\Delta P_{C,s}$	0.0024
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0045
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	3.3
AR	1
PR	1
SR-J	2
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.1
T_g [°C]	611
$T_{10^{13}}$ [°C]	613
$T_{10^{7.6}}$ [°C]	703
c_p [J/(g*K)]	0.550
λ [W/(m•K)]	0.880
AT [°C]	649
ρ [g/cm³]	4.51
E [10^3 N/mm²]	121
µ	0.303
K [10^{-6} mm²/N]	1.87
$HK_{0.1/20}$	712
Abrasion Aa	55

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.1	8.2	10.7	3.6	5.6	8.1
+20/+40	6.4	8.9	11.8	4.8	7.2	10.1
+60/+80	6.8	9.5	12.7	5.5	8.2	11.4

Datasheet

N-LASF55
954306.486

n_d = 1.95380 ν_d = 30.56 $n_F - n_C$ = 0.031211
n_e = 1.96118 ν_e = 30.33 $n_{F'} - n_{C'}$ = 0.031688

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.89507
$n_{1970.1}$	1970.1	1.90226
$n_{1529.6}$	1529.6	1.91065
$n_{1060.0}$	1060.0	1.92162
n_t	1014.0	1.92312
n_s	852.1	1.92991
n_r	706.5	1.93976
n_C	656.3	1.94473
$n_{C'}$	643.8	1.94614
$n_{632.8}$	632.8	1.94748
n_D	589.3	1.95353
n_d	587.6	1.95380
n_e	546.1	1.96118
n_F	486.1	1.97594
$n_{F'}$	480.0	1.97783
n_g	435.8	1.99454
n_h	404.7	2.01096
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.308612280
B_2	0.354736638
B_3	1.922271250
C_1	0.013044700
C_2	0.0557524221
C_3	133.19686900

Constants of Formula for dn/dT

D_0	2.25E-06
D_1	1.09E-08
D_2	-1.64E-11
E_0	9.64E-07
E_1	1.25E-09
λ_{TK} [µm]	0.262

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.710	0.420
2325	0.850	0.660
1970	0.967	0.920
1530	0.995	0.987
1060	0.999	0.997
700	0.995	0.988
660	0.993	0.983
620	0.991	0.977
580	0.987	0.969
546	0.981	0.954
500	0.959	0.900
460	0.920	0.810
436	0.870	0.710
420	0.810	0.590
405	0.700	0.410
400	0.650	0.340
390	0.500	0.180
380	0.310	0.050
370	0.100	0.000
365	0.030	0.000
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	44/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2175
$P_{C,s}$	0.4748
$P_{d,C}$	0.2907
$P_{e,d}$	0.2364
$P_{g,F}$	0.5961
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2142
$P'_{C',s}$	0.5123
$P'_{d,C'}$	0.2416
$P'_{e,d}$	0.2329
$P'_{g,F'}$	0.5274
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0023
$\Delta P_{C,s}$	0.0007
$\Delta P_{F,e}$	0.0006
$\Delta P_{g,F}$	0.0037
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2.3
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.7
T_g [°C]	718
$T_{10^{13}}$ [°C]	722
$T_{10^{7.6}}$ [°C]	796
c_p [J/(g*K)]	0.500
λ [W/(m•K)]	0.900
ρ [g/cm³]	4.86
E [10^3 N/mm²]	126
µ	0.300
K [10^{-6} mm²/N]	1.16
$HK_{0.1/20}$	710
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.9	6.1	8.7	1.3	3.4	5.9
+20/+40	4.0	6.6	9.7	2.4	4.9	7.9
+60/+80	4.3	7.1	10.5	3.0	5.8	9.1

Datasheet

SCHOTT
glass made of ideas

P-LASF47
806409.454

n_d = 1.80610	ν_d = 40.90	$n_F - n_C$ = 0.019709
n_e = 1.81078	ν_e = 40.66	$n_{F'} - n_{C'}$ = 0.019941

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.76040
$n_{1970.1}$	1970.1	1.76755
$n_{1529.6}$	1529.6	1.77538
$n_{1060.0}$	1060.0	1.78432
n_t	1014.0	1.78544
n_s	852.1	1.79028
n_r	706.5	1.79696
n_C	656.3	1.80023
$n_{C'}$	643.8	1.80116
$n_{632.8}$	632.8	1.80203
n_D	589.3	1.80593
n_d	587.6	1.80610
n_e	546.1	1.81078
n_F	486.1	1.81994
$n_{F'}$	480.0	1.82110
n_g	435.8	1.83112
n_h	404.7	1.84064
n_i	365.0	1.85739
$n_{334.1}$	334.1	1.87632
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.855431010
B_2	0.315854649
B_3	1.285618390
C_1	0.010032820
C_2	0.0387095168
C_3	94.54215070

Constants of Formula for dn/dT

D_0	7.87E-06
D_1	1.09E-08
D_2	-1.56E-11
E_0	7.58E-07
E_1	8.92E-10
λ_{TK} [µm]	0.218

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.530	0.200
2325	0.780	0.530
1970	0.950	0.880
1530	0.992	0.981
1060	0.999	0.998
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.994
546	0.998	0.994
500	0.995	0.988
460	0.990	0.975
436	0.985	0.963
420	0.980	0.950
405	0.971	0.930
400	0.967	0.920
390	0.954	0.890
380	0.930	0.830
370	0.880	0.720
365	0.840	0.650
350	0.660	0.350
334	0.250	0.030
320	0.010	
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/33

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2459
$P_{C,s}$	0.5049
$P_{d,C}$	0.2976
$P_{e,d}$	0.2376
$P_{g,F}$	0.5671
$P_{i,h}$	0.8502

Relative Partial Dispersion P'

$P'_{s,t}$	0.2430
$P'_{C',s}$	0.5453
$P'_{d,C'}$	0.2478
$P'_{e,d}$	0.2348
$P'_{g,F'}$	0.5025
$P'_{i,h}$	0.8403

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0117
$\Delta P_{C,s}$	0.0066
$\Delta P_{F,e}$	-0.0021
$\Delta P_{g,F}$	-0.0079
$\Delta P_{i,g}$	-0.0482

Chemical Properties

CR	1
FR	1
SR	51.4
AR	1
PR	2.2
SR-J	3
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.3
T_g [°C]	530
$T_{10^{13}}$ [°C]	532
$T_{10^{7.6}}$ [°C]	627
c_p [J/(g*K)]	0.550
λ [W/(m•K)]	0.850
AT [°C]	580
ρ [g/cm³]	4.54
E [10^3 N/mm²]	120
µ	0.298
K [10^{-6} mm²/N]	2.39
$HK_{0.1/20}$	620
HG	2
Abrasion Aa	70

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.8	8.3	9.8	4.5	5.9	7.3
+20/+40	6.9	8.6	10.3	5.4	7.0	8.7
+60/+80	7.1	8.9	10.8	5.9	7.7	9.5

Datasheet

SCHOTT
glass made of ideas

P-LASF50
809405.454

n_d = 1.80860	ν_d = 40.46	$n_F - n_C$ = 0.019985
n_e = 1.81335	ν_e = 40.22	$n_{F'} - n_{C'}$ = 0.020223

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.76261
$n_{1970.1}$	1970.1	1.76975
$n_{1529.6}$	1529.6	1.77759
$n_{1060.0}$	1060.0	1.78657
n_t	1014.0	1.78770
n_s	852.1	1.79259
n_r	706.5	1.79934
n_C	656.3	1.80266
$n_{C'}$	643.8	1.80359
$n_{632.8}$	632.8	1.80447
n_D	589.3	1.80842
n_d	587.6	1.80860
n_e	546.1	1.81335
n_F	486.1	1.82264
$n_{F'}$	480.0	1.82382
n_g	435.8	1.83399
n_h	404.7	1.84367
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.849105530
B_2	0.329828674
B_3	1.304009010
C_1	0.009992348
C_2	0.0387437988
C_3	95.89676810

Constants of Formula for dn/dT

D_0	8.04E-06
D_1	1.20E-08
D_2	-2.19E-11
E_0	8.20E-07
E_1	9.08E-10
λ_{TK} [µm]	0.209

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.530	0.200
2325	0.780	0.530
1970	0.950	0.880
1530	0.992	0.981
1060	0.999	0.998
700	0.998	0.995
660	0.997	0.993
620	0.997	0.992
580	0.997	0.992
546	0.997	0.992
500	0.995	0.987
460	0.990	0.975
436	0.985	0.963
420	0.980	0.950
405	0.971	0.930
400	0.967	0.920
390	0.954	0.890
380	0.930	0.830
370	0.880	0.720
365	0.840	0.650
350	0.660	0.350
334	0.290	0.030
320	0.030	
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/32

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2448
$P_{C,s}$	0.5037
$P_{d,C}$	0.2973
$P_{e,d}$	0.2376
$P_{g,F}$	0.5680
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2419
$P'_{C',s}$	0.5441
$P'_{d,C'}$	0.2475
$P'_{e,d}$	0.2348
$P'_{g,F'}$	0.5032
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0116
$\Delta P_{C,s}$	0.0065
$\Delta P_{F,e}$	-0.0020
$\Delta P_{g,F}$	-0.0078
$\Delta P_{i,g}$	

Chemical Properties

CR	
FR	
SR	
AR	
PR	
SR-J	3
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.3
T_g [°C]	527
$T_{10^{13}}$ [°C]	526
$T_{10^{7.6}}$ [°C]	660
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.950
AT [°C]	571
ρ [g/cm³]	4.54
E [10^3 N/mm²]	119
µ	0.298
K [10^{-6} mm²/N]	2.41
$HK_{0.1/20}$	655
Abrasion Aa	62

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.9	8.5	10.0	4.5	6.0	7.5
+20/+40	7.1	8.9	10.6	5.5	7.3	9.0
+60/+80	7.3	9.2	11.1	6.1	8.0	9.9

Datasheet

SCHOTT
glass made of ideas

P-LASF51
810409.458

n_d = 1.81000 ν_d = 40.93 $n_F - n_C$ = 0.019792
n_e = 1.81470 ν_e = 40.68 $n_{F'} - n_{C'}$ = 0.020025

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.76437
$n_{1970.1}$	1970.1	1.77145
$n_{1529.6}$	1529.6	1.77923
$n_{1060.0}$	1060.0	1.78815
n_t	1014.0	1.78927
n_s	852.1	1.79413
n_r	706.5	1.80082
n_C	656.3	1.80411
$n_{C'}$	643.8	1.80504
$n_{632.8}$	632.8	1.80591
n_D	589.3	1.80983
n_d	587.6	1.81000
n_e	546.1	1.81470
n_F	486.1	1.82390
$n_{F'}$	480.0	1.82506
n_g	435.8	1.83512
n_h	404.7	1.84467
n_i	365.0	1.86148
$n_{334.1}$	334.1	1.88043
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.845688060
B_2	0.339001600
B_3	1.324189210
C_1	0.009884956
C_2	0.0378097402
C_3	97.84154300

Constants of Formula for dn/dT

D_0	7.79E-06
D_1	1.10E-08
D_2	-2.03E-11
E_0	7.86E-07
E_1	8.78E-10
λ_{TK} [µm]	0.215

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.530	0.200
2325	0.780	0.530
1970	0.950	0.880
1530	0.992	0.981
1060	0.999	0.998
700	0.998	0.995
660	0.997	0.993
620	0.997	0.992
580	0.997	0.992
546	0.997	0.992
500	0.995	0.987
460	0.990	0.975
436	0.985	0.963
420	0.980	0.950
405	0.971	0.930
400	0.967	0.920
390	0.954	0.890
380	0.930	0.830
370	0.880	0.720
365	0.840	0.650
350	0.660	0.350
334	0.250	0.030
320	0.010	
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/33

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2453
$P_{C,s}$	0.5045
$P_{d,C}$	0.2976
$P_{e,d}$	0.2376
$P_{g,F}$	0.5670
$P_{i,h}$	0.8491

Relative Partial Dispersion P'

$P'_{s,t}$	0.2425
$P'_{C',s}$	0.5450
$P'_{d,C'}$	0.2477
$P'_{e,d}$	0.2348
$P'_{g,F'}$	0.5024
$P'_{i,h}$	0.8392

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0107
$\Delta P_{C,s}$	0.0062
$\Delta P_{F,e}$	-0.0021
$\Delta P_{g,F}$	-0.0080
$\Delta P_{i,g}$	-0.0494

Chemical Properties

CR	1
FR	1
SR	51.3
AR	1
PR	2.2
SR-J	3
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	526
$T_{10^{13}}$ [°C]	534
$T_{10^{7.6}}$ [°C]	629
c_p [J/(g*K)]	0.560
λ [W/(m•K)]	0.870
AT [°C]	570
ρ [g/cm³]	4.58
E [10^3 N/mm²]	119
µ	0.299
K [10^{-6} mm²/N]	2.32
$HK_{0.1/20}$	722
Abrasion Aa	66

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.8	8.3	9.9	4.4	5.9	7.3
+20/+40	6.9	8.7	10.4	5.4	7.1	8.8
+60/+80	7.1	8.9	10.8	5.9	7.7	9.6

Datasheet

SCHOTT
glass made of ideas

N-SF1
717296.303

n_d = 1.71736	ν_d = 29.62	$n_F - n_C$ = 0.024219
n_e = 1.72308	ν_e = 29.39	$n_{F'} - n_{C'}$ = 0.024606

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67021
$n_{1970.1}$	1970.1	1.67641
$n_{1529.6}$	1529.6	1.68350
$n_{1060.0}$	1060.0	1.69240
n_t	1014.0	1.69358
n_s	852.1	1.69889
n_r	706.5	1.70651
n_C	656.3	1.71035
$n_{C'}$	643.8	1.71144
$n_{632.8}$	632.8	1.71247
n_D	589.3	1.71715
n_d	587.6	1.71736
n_e	546.1	1.72308
n_F	486.1	1.73457
$n_{F'}$	480.0	1.73605
n_g	435.8	1.74919
n_h	404.7	1.76224
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.608651580
B_2	0.237725916
B_3	1.515306530
C_1	0.011965488
C_2	0.0590589722
C_3	135.52167600

Constants of Formula for dn/dT

D_0	-3.72E-06
D_1	8.05E-09
D_2	-1.71E-11
E_0	8.98E-07
E_1	1.34E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.460
2325	0.800	0.580
1970	0.940	0.850
1530	0.989	0.973
1060	0.998	0.995
700	0.996	0.990
660	0.994	0.986
620	0.995	0.987
580	0.996	0.990
546	0.994	0.986
500	0.987	0.968
460	0.976	0.940
436	0.963	0.910
420	0.950	0.870
405	0.900	0.760
400	0.870	0.700
390	0.770	0.520
380	0.570	0.250
370	0.250	0.030
365	0.100	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2190
$P_{C,s}$	0.4733
$P_{d,C}$	0.2895
$P_{e,d}$	0.2360
$P_{g,F}$	0.6037
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2156
$P'_{C',s}$	0.5103
$P'_{d,C'}$	0.2405
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5340
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0068
$\Delta P_{C,s}$	0.0013
$\Delta P_{F,e}$	0.0016
$\Delta P_{g,F}$	0.0097
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.5
T_g [°C]	553
$T_{10^{13}}$ [°C]	554
$T_{10^{7.6}}$ [°C]	660
c_p [J/(g*K)]	0.750
λ [W/(m•K)]	1.000
ρ [g/cm³]	3.03
E [10^3 N/mm²]	90
µ	0.250
K [10^{-6} mm²/N]	2.72
$HK_{0.1/20}$	540
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.1	1.7	3.6	-2.2	-0.7	1.2
+20/+40	0.0	1.8	4.2	-1.5	0.3	2.7
+60/+80	0.0	2.1	4.8	-1.1	0.9	3.5

Datasheet

SCHOTT
glass made of ideas

N-SF2
648338.272

n_d = 1.64769	ν_d = 33.82	$n_F - n_C$ = 0.019151
n_e = 1.65222	ν_e = 33.56	$n_{F'} - n_{C'}$ = 0.019435

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.60661
$n_{1970.1}$	1970.1	1.61268
$n_{1529.6}$	1529.6	1.61944
$n_{1060.0}$	1060.0	1.62738
n_t	1014.0	1.62839
n_s	852.1	1.63282
n_r	706.5	1.63902
n_C	656.3	1.64210
$n_{C'}$	643.8	1.64298
$n_{632.8}$	632.8	1.64380
n_D	589.3	1.64752
n_d	587.6	1.64769
n_e	546.1	1.65222
n_F	486.1	1.66125
$n_{F'}$	480.0	1.66241
n_g	435.8	1.67265
n_h	404.7	1.68273
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.473431270
B_2	0.163681849
B_3	1.369208990
C_1	0.010901910
C_2	0.0585683687
C_3	127.40493300

Constants of Formula for dn/dT

D_0	3.10E-06
D_1	1.75E-08
D_2	6.62E-11
E_0	7.51E-07
E_1	8.99E-10
λ_{TK} [µm]	0.277

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.670
2325	0.900	0.760
1970	0.971	0.930
1530	0.994	0.984
1060	0.999	0.997
700	0.995	0.987
660	0.994	0.984
620	0.994	0.984
580	0.995	0.987
546	0.994	0.986
500	0.990	0.975
460	0.984	0.961
436	0.979	0.950
420	0.970	0.930
405	0.940	0.870
400	0.930	0.830
390	0.860	0.680
380	0.690	0.400
370	0.330	0.060
365	0.130	0.010
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2311
$P_{C,s}$	0.4848
$P_{d,C}$	0.2918
$P_{e,d}$	0.2364
$P_{g,F}$	0.5950
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2277
$P'_{C',s}$	0.5228
$P'_{d,C'}$	0.2425
$P'_{e,d}$	0.2329
$P'_{g,F'}$	0.5267
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0106
$\Delta P_{C,s}$	0.0031
$\Delta P_{F,e}$	0.0012
$\Delta P_{g,F}$	0.0081
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.8
T_g [°C]	608
$T_{10^{13}}$ [°C]	607
$T_{10^{7.6}}$ [°C]	731
c_p [J/(g*K)]	0.790
λ [W/(m•K)]	1.140
ρ [g/cm³]	2.72
E [10^3 N/mm²]	86
µ	0.231
K [10^{-6} mm²/N]	3.06
$HK_{0.1/20}$	539

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.4	4.8	6.4	1.3	2.5	4.1
+20/+40	3.5	5.1	7.0	2.1	3.6	5.5
+60/+80	4.2	5.9	8.0	3.1	4.8	6.9

Datasheet

SCHOTT
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N-SF4
755274.315

n_d = 1.75513	ν_d = 27.38	$n_F - n_C$ = 0.027583
n_e = 1.76164	ν_e = 27.16	$n_{F'} - n_{C'}$ = 0.028044

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70434
$n_{1970.1}$	1970.1	1.71052
$n_{1529.6}$	1529.6	1.71773
$n_{1060.0}$	1060.0	1.72717
n_t	1014.0	1.72846
n_s	852.1	1.73432
n_r	706.5	1.74286
n_C	656.3	1.74719
$n_{C'}$	643.8	1.74842
$n_{632.8}$	632.8	1.74959
n_D	589.3	1.75489
n_d	587.6	1.75513
n_e	546.1	1.76164
n_F	486.1	1.77477
$n_{F'}$	480.0	1.77647
n_g	435.8	1.79158
n_h	404.7	1.80668
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.677802820
B_2	0.282849893
B_3	1.635392760
C_1	0.012679345
C_2	0.0602038419
C_3	145.76049600

Constants of Formula for dn/dT

D_0	-4.88E-06
D_1	6.57E-09
D_2	-2.72E-11
E_0	9.67E-07
E_1	1.48E-09
λ_{TK} [µm]	0.282

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.530
2325	0.820	0.600
1970	0.940	0.860
1530	0.992	0.980
1060	0.999	0.999
700	0.994	0.984
660	0.991	0.978
620	0.992	0.979
580	0.993	0.982
546	0.991	0.977
500	0.979	0.950
460	0.961	0.910
436	0.940	0.860
420	0.920	0.800
405	0.860	0.690
400	0.830	0.630
390	0.740	0.470
380	0.560	0.240
370	0.250	0.030
365	0.100	0.000
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	43/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2123
$P_{C,s}$	0.4666
$P_{d,C}$	0.2880
$P_{e,d}$	0.2358
$P_{g,F}$	0.6096
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2088
$P'_{C',s}$	0.5030
$P'_{d,C'}$	0.2392
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5390
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0040
$\Delta P_{C,s}$	-0.0002
$\Delta P_{F,e}$	0.0022
$\Delta P_{g,F}$	0.0118
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1.3
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.9
T_g [°C]	570
$T_{10^{13}}$ [°C]	559
$T_{10^{7.6}}$ [°C]	661
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	0.950
ρ [g/cm³]	3.15
E [10^3 N/mm²]	90
µ	0.256
K [10^{-6} mm²/N]	2.76
$HK_{0.1/20}$	520
HG	6

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.5	1.2	3.5	-2.9	-1.2	1.0
+20/+40	-0.7	1.4	4.2	-2.2	-0.1	2.6
+60/+80	-0.8	1.6	4.7	-1.9	0.4	3.5

Datasheet

N-SF5
673323.286

n_d = 1.67271	ν_d = 32.25	$n_F - n_C$ = 0.020858
n_e = 1.67763	ν_e = 32.00	$n_{F'} - n_{C'}$ = 0.021177

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.62935
$n_{1970.1}$	1970.1	1.63554
$n_{1529.6}$	1529.6	1.64249
$n_{1060.0}$	1060.0	1.65080
n_t	1014.0	1.65188
n_s	852.1	1.65661
n_r	706.5	1.66330
n_C	656.3	1.66664
$n_{C'}$	643.8	1.66759
$n_{632.8}$	632.8	1.66848
n_D	589.3	1.67253
n_d	587.6	1.67271
n_e	546.1	1.67763
n_F	486.1	1.68750
$n_{F'}$	480.0	1.68876
n_g	435.8	1.69998
n_h	404.7	1.71106
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.524818890
B_2	0.187085527
B_3	1.427290150
C_1	0.011254756
C_2	0.0588995392
C_3	129.14167500

Constants of Formula for dn/dT

D_0	-2.51E-07
D_1	1.07E-08
D_2	-2.40E-11
E_0	7.85E-07
E_1	1.15E-09
λ_{TK} [µm]	0.278

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.500
2325	0.830	0.630
1970	0.950	0.880
1530	0.990	0.975
1060	0.998	0.994
700	0.996	0.989
660	0.995	0.987
620	0.995	0.988
580	0.996	0.991
546	0.995	0.988
500	0.990	0.976
460	0.982	0.956
436	0.973	0.940
420	0.963	0.910
405	0.930	0.830
400	0.910	0.780
390	0.830	0.620
380	0.640	0.330
370	0.280	0.040
365	0.120	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/36

Remarks

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2270
$P_{C,s}$	0.4807
$P_{d,C}$	0.2910
$P_{e,d}$	0.2362
$P_{g,F}$	0.5984
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2236
$P'_{C',s}$	0.5184
$P'_{d,C'}$	0.2418
$P'_{e,d}$	0.2327
$P'_{g,F'}$	0.5295
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0097
$\Delta P_{C,s}$	0.0027
$\Delta P_{F,e}$	0.0014
$\Delta P_{g,F}$	0.0088
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	578
$T_{10^{13}}$ [°C]	576
$T_{10^{7.6}}$ [°C]	693
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.000
ρ [g/cm³]	2.86
E [10^3 N/mm²]	87
µ	0.237
K [10^{-6} mm²/N]	2.99
$HK_{0.1/20}$	620
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.8	3.1	4.8	-0.5	0.8	2.5
+20/+40	1.8	3.4	5.5	0.4	2.0	4.0
+60/+80	1.9	3.7	6.0	0.8	2.5	4.8

Datasheet

N-SF6
805254.337

n_d = 1.80518 ν_d = 25.36 $n_F - n_C$ = 0.031750
n_e = 1.81266 ν_e = 25.16 $n_{F'} - n_{C'}$ = 0.032304

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74895
$n_{1970.1}$	1970.1	1.75541
$n_{1529.6}$	1529.6	1.76307
$n_{1060.0}$	1060.0	1.77341
n_t	1014.0	1.77486
n_s	852.1	1.78144
n_r	706.5	1.79114
n_C	656.3	1.79608
$n_{C'}$	643.8	1.79749
$n_{632.8}$	632.8	1.79883
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81266
n_F	486.1	1.82783
$n_{F'}$	480.0	1.82980
n_g	435.8	1.84738
n_h	404.7	1.86506
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.779317630
B_2	0.338149866
B_3	2.087344740
C_1	0.013371418
C_2	0.0617533621
C_3	174.01759000

Constants of Formula for dn/dT

D_0	-4.93E-06
D_1	7.02E-09
D_2	-2.40E-11
E_0	9.84E-07
E_1	1.54E-09
λ_{TK} [µm]	0.290

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.780	0.530
2325	0.810	0.590
1970	0.940	0.860
1530	0.991	0.978
1060	0.998	0.996
700	0.993	0.983
660	0.990	0.976
620	0.991	0.978
580	0.992	0.980
546	0.989	0.972
500	0.977	0.940
460	0.961	0.910
436	0.950	0.870
420	0.920	0.810
405	0.860	0.680
400	0.820	0.610
390	0.700	0.410
380	0.480	0.160
370	0.160	0.010
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	45/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2074
$P_{C,s}$	0.4610
$P_{d,C}$	0.2867
$P_{e,d}$	0.2356
$P_{g,F}$	0.6158
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2039
$P'_{C',s}$	0.4969
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	-0.0010
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0146
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	589
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	669
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.960
ρ [g/cm³]	3.37
E [10^3 N/mm²]	93
µ	0.262
K [10^{-6} mm²/N]	2.82
$HK_{0.1/20}$	550
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.7	1.2	3.9	-3.0	-1.2	1.3
+20/+40	-0.8	1.5	4.8	-2.3	0.0	3.1
+60/+80	-0.8	1.8	5.4	-2.0	0.6	4.1

Datasheet

SCHOTT
glass made of ideas

N-SF6HT
805254.337

n_d = 1.80518	ν_d = 25.36	$n_F - n_C$ = 0.031750
n_e = 1.81266	ν_e = 25.16	$n_{F'} - n_{C'}$ = 0.032304

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74895
$n_{1970.1}$	1970.1	1.75541
$n_{1529.6}$	1529.6	1.76307
$n_{1060.0}$	1060.0	1.77341
n_t	1014.0	1.77486
n_s	852.1	1.78144
n_r	706.5	1.79114
n_C	656.3	1.79608
$n_{C'}$	643.8	1.79749
$n_{632.8}$	632.8	1.79883
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81266
n_F	486.1	1.82783
$n_{F'}$	480.0	1.82980
n_g	435.8	1.84738
n_h	404.7	1.86506
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.779317630
B_2	0.338149866
B_3	2.087344740
C_1	0.013371418
C_2	0.0617533621
C_3	174.01759000

Constants of Formula for dn/dT

D_0	-4.93E-06
D_1	7.02E-09
D_2	-2.40E-11
E_0	9.84E-07
E_1	1.54E-09
λ_{TK} [µm]	0.290

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.790	0.560
2325	0.830	0.620
1970	0.950	0.870
1530	0.992	0.980
1060	0.999	0.997
700	0.994	0.984
660	0.991	0.977
620	0.992	0.979
580	0.992	0.981
546	0.990	0.975
500	0.980	0.950
460	0.966	0.920
436	0.954	0.890
420	0.940	0.850
405	0.900	0.770
400	0.880	0.720
390	0.790	0.560
380	0.590	0.270
370	0.210	0.020
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	44/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2074
$P_{C,s}$	0.4610
$P_{d,C}$	0.2867
$P_{e,d}$	0.2356
$P_{g,F}$	0.6158
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2039
$P'_{C',s}$	0.4969
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	-0.0010
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0146
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	589
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	669
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.960
ρ [g/cm^3]	3.37
E [10^3 N/mm^2]	93
µ	0.262
K [10^{-6} mm^2/N]	2.82
$HK_{0.1/20}$	550
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.7	1.2	3.9	-3.0	-1.2	1.3
+20/+40	-0.8	1.5	4.8	-2.3	0.0	3.1
+60/+80	-0.8	1.8	5.4	-2.0	0.6	4.1

Datasheet

N-SF6HTultra
805254.337

n_d = 1.80518	ν_d = 25.36	$n_F - n_C$ = 0.031750
n_e = 1.81266	ν_e = 25.16	$n_{F'} - n_{C'}$ = 0.032304

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.74895
$n_{1970.1}$	1970.1	1.75541
$n_{1529.6}$	1529.6	1.76307
$n_{1060.0}$	1060.0	1.77341
n_t	1014.0	1.77486
n_s	852.1	1.78144
n_r	706.5	1.79114
n_C	656.3	1.79608
$n_{C'}$	643.8	1.79749
$n_{632.8}$	632.8	1.79883
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81266
n_F	486.1	1.82783
$n_{F'}$	480.0	1.82980
n_g	435.8	1.84738
n_h	404.7	1.86506
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.779317630
B_2	0.338149866
B_3	2.087344740
C_1	0.013371418
C_2	0.0617533621
C_3	174.01759000

Constants of Formula for dn/dT

D_0	-4.93E-06
D_1	7.02E-09
D_2	-2.40E-11
E_0	9.84E-07
E_1	1.54E-09
λ_{TK} [µm]	0.290

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.800	0.570
2325	0.830	0.620
1970	0.950	0.880
1530	0.992	0.981
1060	0.999	0.999
700	0.994	0.984
660	0.991	0.978
620	0.992	0.980
580	0.994	0.984
546	0.992	0.981
500	0.984	0.960
460	0.972	0.930
436	0.961	0.910
420	0.950	0.870
405	0.910	0.790
400	0.890	0.740
390	0.800	0.580
380	0.600	0.280
370	0.220	0.020
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	43/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2074
$P_{C,s}$	0.4610
$P_{d,C}$	0.2867
$P_{e,d}$	0.2356
$P_{g,F}$	0.6158
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2039
$P'_{C',s}$	0.4969
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0031
$\Delta P_{C,s}$	-0.0010
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0146
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	2
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	589
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	669
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.960
ρ [g/cm³]	3.37
E [10^3 N/mm²]	93
µ	0.262
K [10^{-6} mm²/N]	2.82
$HK_{0.1/20}$	550
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.7	1.2	3.9	-3.0	-1.2	1.3
+20/+40	-0.8	1.5	4.8	-2.3	0.0	3.1
+60/+80	-0.8	1.8	5.4	-2.0	0.6	4.1

Datasheet

SCHOTT
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N-SF8
689313.290

n_d = 1.68894	ν_d = 31.31	$n_F - n_C$ = 0.022005
n_e = 1.69413	ν_e = 31.06	$n_{F'} - n_{C'}$ = 0.022346

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.64448
$n_{1970.1}$	1970.1	1.65060
$n_{1529.6}$	1529.6	1.65753
$n_{1060.0}$	1060.0	1.66600
n_t	1014.0	1.66711
n_s	852.1	1.67203
n_r	706.5	1.67904
n_C	656.3	1.68254
$n_{C'}$	643.8	1.68354
$n_{632.8}$	632.8	1.68448
n_D	589.3	1.68874
n_d	587.6	1.68894
n_e	546.1	1.69413
n_F	486.1	1.70455
$n_{F'}$	480.0	1.70589
n_g	435.8	1.71775
n_h	404.7	1.72948
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.550758120
B_2	0.209816918
B_3	1.462054910
C_1	0.011433834
C_2	0.0582725652
C_3	133.24165000

Constants of Formula for dn/dT

D_0	-1.94E-06
D_1	9.70E-09
D_2	-2.34E-11
E_0	8.32E-07
E_1	1.15E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.750	0.480
2325	0.820	0.600
1970	0.950	0.870
1530	0.988	0.970
1060	0.997	0.993
700	0.995	0.987
660	0.993	0.983
620	0.993	0.983
580	0.994	0.986
546	0.993	0.983
500	0.985	0.963
460	0.976	0.940
436	0.965	0.910
420	0.950	0.880
405	0.920	0.810
400	0.900	0.770
390	0.830	0.630
380	0.670	0.370
370	0.350	0.070
365	0.160	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2236
$P_{C,s}$	0.4778
$P_{d,C}$	0.2905
$P_{e,d}$	0.2362
$P_{g,F}$	0.5999
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2202
$P'_{C',s}$	0.5152
$P'_{d,C'}$	0.2413
$P'_{e,d}$	0.2326
$P'_{g,F'}$	0.5308
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0080
$\Delta P_{C,s}$	0.0019
$\Delta P_{F,e}$	0.0014
$\Delta P_{g,F}$	0.0087
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	567
$T_{10^{13}}$ [°C]	564
$T_{10^{7.6}}$ [°C]	678
c_p [J/(g*K)]	0.770
λ [W/(m•K)]	1.030
ρ [g/cm³]	2.90
E [10^3 N/mm²]	88
µ	0.245
K [10^{-6} mm²/N]	2.95
$HK_{0.1/20}$	600
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.0	2.4	4.2	-1.3	0.1	1.8
+20/+40	0.9	2.6	4.8	-0.5	1.2	3.3
+60/+80	1.0	2.9	5.3	-0.1	1.7	4.1

Datasheet

SCHOTT
glass made of ideas

N-SF10
728285.305

n_d = 1.72828	ν_d = 28.53	$n_F - n_C$ = 0.025524
n_e = 1.73430	ν_e = 28.31	$n_{F'} - n_{C'}$ = 0.025941

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67981
$n_{1970.1}$	1970.1	1.68597
$n_{1529.6}$	1529.6	1.69308
$n_{1060.0}$	1060.0	1.70217
n_t	1014.0	1.70340
n_s	852.1	1.70891
n_r	706.5	1.71688
n_C	656.3	1.72091
$n_{C'}$	643.8	1.72206
$n_{632.8}$	632.8	1.72314
n_D	589.3	1.72806
n_d	587.6	1.72828
n_e	546.1	1.73430
n_F	486.1	1.74643
$n_{F'}$	480.0	1.74800
n_g	435.8	1.76191
n_h	404.7	1.77578
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.621539020
B_2	0.256287842
B_3	1.644475520
C_1	0.012224146
C_2	0.0595736775
C_3	147.46879300

Constants of Formula for dn/dT

D_0	-4.68E-06
D_1	7.41E-09
D_2	-1.89E-11
E_0	9.49E-07
E_1	1.42E-09
λ_{TK} [µm]	0.279

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.660
2325	0.900	0.760
1970	0.971	0.930
1530	0.994	0.985
1060	0.996	0.990
700	0.993	0.983
660	0.990	0.976
620	0.991	0.977
580	0.991	0.978
546	0.989	0.973
500	0.978	0.950
460	0.963	0.910
436	0.950	0.870
420	0.920	0.820
405	0.870	0.700
400	0.840	0.640
390	0.730	0.450
380	0.530	0.200
370	0.180	
365	0.060	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2160
$P_{C,s}$	0.4701
$P_{d,C}$	0.2888
$P_{e,d}$	0.2359
$P_{g,F}$	0.6066
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2125
$P'_{C',s}$	0.5068
$P'_{d,C'}$	0.2398
$P'_{e,d}$	0.2321
$P'_{g,F'}$	0.5365
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0057
$\Delta P_{C,s}$	0.0007
$\Delta P_{F,e}$	0.0019
$\Delta P_{g,F}$	0.0108
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.8
T_g [°C]	559
$T_{10^{13}}$ [°C]	549
$T_{10^{7.6}}$ [°C]	652
c_p [J/(g*K)]	0.740
λ [W/(m•K)]	0.960
ρ [g/cm³]	3.05
E [10^3 N/mm²]	87
µ	0.252
K [10^{-6} mm²/N]	2.92
$HK_{0.1/20}$	540
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.4	1.3	3.4	-2.7	-1.1	1.0
+20/+40	-0.5	1.5	4.1	-2.0	-0.1	2.5
+60/+80	-0.5	1.7	4.6	-1.7	0.5	3.4

Datasheet

SCHOTT
glass made of ideas

N-SF11
785257.322

n_d = 1.78472	ν_d = 25.68	$n_F - n_C$ = 0.030558
n_e = 1.79192	ν_e = 25.47	$n_{F'} - n_{C'}$ = 0.031088

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.72937
$n_{1970.1}$	1970.1	1.73600
$n_{1529.6}$	1529.6	1.74377
$n_{1060.0}$	1060.0	1.75401
n_t	1014.0	1.75542
n_s	852.1	1.76182
n_r	706.5	1.77119
n_C	656.3	1.77596
$n_{C'}$	643.8	1.77732
$n_{632.8}$	632.8	1.77860
n_D	589.3	1.78446
n_d	587.6	1.78472
n_e	546.1	1.79192
n_F	486.1	1.80651
$n_{F'}$	480.0	1.80841
n_g	435.8	1.82533
n_h	404.7	1.84235
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.737596950
B_2	0.313747346
B_3	1.898781010
C_1	0.013188707
C_2	0.0623068142
C_3	155.23629000

Constants of Formula for dn/dT

D_0	-3.56E-06
D_1	9.20E-09
D_2	-2.10E-11
E_0	9.65E-07
E_1	1.44E-09
λ_{TK} [µm]	0.294

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.830	0.620
2325	0.870	0.700
1970	0.965	0.920
1530	0.994	0.985
1060	0.999	0.998
700	0.994	0.985
660	0.992	0.981
620	0.992	0.981
580	0.994	0.984
546	0.991	0.978
500	0.981	0.953
460	0.967	0.920
436	0.950	0.870
420	0.920	0.810
405	0.850	0.670
400	0.820	0.600
390	0.690	0.390
380	0.430	0.120
370	0.080	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	44/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2095
$P_{C,s}$	0.4625
$P_{d,C}$	0.2868
$P_{e,d}$	0.2355
$P_{g,F}$	0.6156
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2059
$P'_{C',s}$	0.4984
$P'_{d,C'}$	0.2381
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5442
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0052
$\Delta P_{C,s}$	-0.0003
$\Delta P_{F,e}$	0.0027
$\Delta P_{g,F}$	0.0150
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	592
$T_{10^{13}}$ [°C]	590
$T_{10^{7.6}}$ [°C]	688
c_p [J/(g*K)]	0.710
λ [W/(m•K)]	0.950
ρ [g/cm³]	3.22
E [10^3 N/mm²]	92
µ	0.257
K [10^{-6} mm²/N]	2.94
$HK_{0.1/20}$	615
HG	4

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.1	2.0	4.6	-2.3	-0.5	2.1
+20/+40	0.1	2.4	5.6	-1.4	0.8	4.0
+60/+80	0.2	2.7	6.3	-1.0	1.5	5.1

Datasheet

N-SF14
762265.312

n_d = 1.76182	ν_d = 26.53	$n_F - n_C$ = 0.028715
n_e = 1.76859	ν_e = 26.32	$n_{F'} - n_{C'}$ = 0.029204

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70954
$n_{1970.1}$	1970.1	1.71581
$n_{1529.6}$	1529.6	1.72315
$n_{1060.0}$	1060.0	1.73284
n_t	1014.0	1.73417
n_s	852.1	1.74022
n_r	706.5	1.74907
n_C	656.3	1.75356
$n_{C'}$	643.8	1.75485
$n_{632.8}$	632.8	1.75606
n_D	589.3	1.76157
n_d	587.6	1.76182
n_e	546.1	1.76859
n_F	486.1	1.78228
$n_{F'}$	480.0	1.78405
n_g	435.8	1.79986
n_h	404.7	1.81570
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.690223610
B_2	0.288870052
B_3	1.704518700
C_1	0.013051211
C_2	0.0613691880
C_3	149.51768900

Constants of Formula for dn/dT

D_0	-5.56E-06
D_1	7.09E-09
D_2	-1.09E-11
E_0	9.85E-07
E_1	1.39E-09
λ_{TK} [µm]	0.287

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.800	0.570
2325	0.840	0.640
1970	0.950	0.880
1530	0.992	0.980
1060	0.999	0.998
700	0.994	0.985
660	0.995	0.987
620	0.995	0.987
580	0.995	0.987
546	0.993	0.983
500	0.985	0.964
460	0.975	0.940
436	0.963	0.910
420	0.950	0.870
405	0.910	0.790
400	0.890	0.750
390	0.820	0.610
380	0.640	0.330
370	0.280	0.040
365	0.100	0.000
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/36

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2107
$P_{C,s}$	0.4646
$P_{d,C}$	0.2875
$P_{e,d}$	0.2357
$P_{g,F}$	0.6122
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2072
$P'_{C',s}$	0.5008
$P'_{d,C'}$	0.2387
$P'_{e,d}$	0.2318
$P'_{g,F'}$	0.5413
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0044
$\Delta P_{C,s}$	-0.0002
$\Delta P_{F,e}$	0.0024
$\Delta P_{g,F}$	0.0130
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.9
T_g [°C]	566
$T_{10^{13}}$ [°C]	562
$T_{10^{7.6}}$ [°C]	657
c_p [J/(g*K)]	0.750
λ [W/(m•K)]	1.000
ρ [g/cm³]	3.12
E [10^3 N/mm²]	88
µ	0.259
K [10^{-6} mm²/N]	2.89
$HK_{0.1/20}$	515
HG	5

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.9	0.9	3.4	-3.2	-1.5	0.9
+20/+40	-1.1	1.1	4.1	-2.6	-0.4	2.5
+60/+80	-1.1	1.4	4.7	-2.2	0.2	3.4

Datasheet

SCHOTT
glass made of ideas

N-SF15
699302.292

n_d = 1.69892	ν_d = 30.20	$n_F - n_C$ = 0.023142
n_e = 1.70438	ν_e = 29.96	$n_{F'} - n_{C'}$ = 0.023511

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.65267
$n_{1970.1}$	1970.1	1.65899
$n_{1529.6}$	1529.6	1.66616
$n_{1060.0}$	1060.0	1.67494
n_t	1014.0	1.67609
n_s	852.1	1.68122
n_r	706.5	1.68854
n_C	656.3	1.69222
$n_{C'}$	643.8	1.69326
$n_{632.8}$	632.8	1.69425
n_D	589.3	1.69872
n_d	587.6	1.69892
n_e	546.1	1.70438
n_F	486.1	1.71536
$n_{F'}$	480.0	1.71677
n_g	435.8	1.72933
n_h	404.7	1.74182
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.570556340
B_2	0.218987094
B_3	1.508240170
C_1	0.011650701
C_2	0.0597856897
C_3	132.70933900

Constants of Formula for dn/dT

D_0	-7.15E-07
D_1	1.04E-08
D_2	-2.62E-11
E_0	8.56E-07
E_1	1.29E-09
λ_{TK} [µm]	0.281

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.510
2325	0.840	0.640
1970	0.954	0.890
1530	0.990	0.976
1060	0.998	0.996
700	0.995	0.988
660	0.993	0.983
620	0.994	0.984
580	0.994	0.986
546	0.994	0.985
500	0.988	0.970
460	0.977	0.940
436	0.964	0.910
420	0.940	0.860
405	0.890	0.740
400	0.860	0.680
390	0.750	0.480
380	0.530	0.200
370	0.160	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2216
$P_{C,s}$	0.4751
$P_{d,C}$	0.2897
$P_{e,d}$	0.2360
$P_{g,F}$	0.6038
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2181
$P'_{C',s}$	0.5122
$P'_{d,C'}$	0.2406
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5341
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0085
$\Delta P_{C,s}$	0.0018
$\Delta P_{F,e}$	0.0018
$\Delta P_{g,F}$	0.0108
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.3
T_g [°C]	580
$T_{10^{13}}$ [°C]	578
$T_{10^{7.6}}$ [°C]	692
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	1.040
ρ [g/cm³]	2.92
E [10^3 N/mm²]	90
µ	0.243
K [10^{-6} mm²/N]	3.04
$HK_{0.1/20}$	610
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	1.6	3.1	5.0	-0.7	0.8	2.6
+20/+40	1.6	3.4	5.8	0.2	2.0	4.3
+60/+80	1.7	3.7	6.4	0.6	2.6	5.2

Datasheet

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N-SF57
847238.353

n_d = 1.84666	ν_d = 23.78	$n_F - n_C$ = 0.035604
n_e = 1.85504	ν_e = 23.59	$n_{F'} - n_{C'}$ = 0.036247

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78502
$n_{1970.1}$	1970.1	1.79190
$n_{1529.6}$	1529.6	1.80011
$n_{1060.0}$	1060.0	1.81138
n_t	1014.0	1.81296
n_s	852.1	1.82023
n_r	706.5	1.83099
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83807
$n_{632.8}$	632.8	1.83956
n_D	589.3	1.84635
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87210
$n_{F'}$	480.0	1.87432
n_g	435.8	1.89423
n_h	404.7	1.91440
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.875438310
B_2	0.373757490
B_3	2.300017970
C_1	0.014174952
C_2	0.0640509927
C_3	177.38979500

Constants of Formula for dn/dT

D_0	-4.51E-06
D_1	8.73E-09
D_2	-1.64E-11
E_0	1.07E-06
E_1	1.57E-09
λ_{TK} [µm]	0.295

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.840	0.640
1970	0.956	0.890
1530	0.992	0.980
1060	0.999	0.997
700	0.991	0.977
660	0.987	0.969
620	0.988	0.971
580	0.990	0.975
546	0.986	0.965
500	0.971	0.930
460	0.950	0.880
436	0.920	0.810
420	0.870	0.710
405	0.780	0.540
400	0.730	0.460
390	0.570	0.250
380	0.300	0.050
370	0.060	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	42/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2005
$P'_{C',s}$	0.4922
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5493
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0178
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	629
$T_{10^{13}}$ [°C]	616
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.990
ρ [g/cm³]	3.53
E [10^3 N/mm²]	96
µ	0.260
K [10^{-6} mm²/N]	2.78
$HK_{0.1/20}$	520
HG	4
Abrasion Aa	175

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.5	1.7	4.9	-2.9	-0.8	2.3
+20/+40	-0.5	2.2	6.0	-2.1	0.6	4.3
+60/+80	-0.4	2.6	6.9	-1.6	1.3	5.6

Datasheet

SCHOTT
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N-SF57HT
847238.353

n_d = 1.84666	ν_d = 23.78	$n_F - n_C$ = 0.035604
n_e = 1.85504	ν_e = 23.59	$n_{F'} - n_{C'}$ = 0.036247

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78502
$n_{1970.1}$	1970.1	1.79190
$n_{1529.6}$	1529.6	1.80011
$n_{1060.0}$	1060.0	1.81138
n_t	1014.0	1.81296
n_s	852.1	1.82023
n_r	706.5	1.83099
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83807
$n_{632.8}$	632.8	1.83956
n_D	589.3	1.84635
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87210
$n_{F'}$	480.0	1.87432
n_g	435.8	1.89423
n_h	404.7	1.91440
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.875438310
B_2	0.373757490
B_3	2.300017970
C_1	0.014174952
C_2	0.0640509927
C_3	177.38979500

Constants of Formula for dn/dT

D_0	-4.51E-06
D_1	8.73E-09
D_2	-1.64E-11
E_0	1.07E-06
E_1	1.57E-09
λ_{TK} [µm]	0.295

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.840	0.640
1970	0.956	0.890
1530	0.992	0.980
1060	0.999	0.998
700	0.992	0.979
660	0.988	0.971
620	0.989	0.973
580	0.991	0.977
546	0.987	0.967
500	0.972	0.930
460	0.951	0.880
436	0.930	0.830
420	0.900	0.760
405	0.830	0.630
400	0.790	0.560
390	0.660	0.350
380	0.380	0.090
370	0.060	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	41/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2005
$P'_{C',s}$	0.4922
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5493
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0178
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	629
$T_{10^{13}}$ [°C]	616
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.990
ρ [g/cm^3]	3.53
E [10^3 N/mm^2]	96
µ	0.260
K [10^{-6} mm^2/N]	2.78
$HK_{0.1/20}$	520
HG	4
Abrasion Aa	175

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.5	1.7	4.9	-2.9	-0.8	2.3
+20/+40	-0.5	2.2	6.0	-2.1	0.6	4.3
+60/+80	-0.4	2.6	6.9	-1.6	1.3	5.6

Datasheet

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N-SF57HTultra
847238.353

n_d = 1.84666	ν_d = 23.78	$n_F - n_C$ = 0.035604
n_e = 1.85504	ν_e = 23.59	$n_{F'} - n_{C'}$ = 0.036247

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.78502
$n_{1970.1}$	1970.1	1.79190
$n_{1529.6}$	1529.6	1.80011
$n_{1060.0}$	1060.0	1.81138
n_t	1014.0	1.81296
n_s	852.1	1.82023
n_r	706.5	1.83099
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83807
$n_{632.8}$	632.8	1.83956
n_D	589.3	1.84635
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87210
$n_{F'}$	480.0	1.87432
n_g	435.8	1.89423
n_h	404.7	1.91440
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.875438310
B_2	0.373757490
B_3	2.300017970
C_1	0.014174952
C_2	0.0640509927
C_3	177.38979500

Constants of Formula for dn/dT

D_0	-4.51E-06
D_1	8.73E-09
D_2	-1.64E-11
E_0	1.07E-06
E_1	1.57E-09
λ_{TK} [µm]	0.295

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.810	0.580
2325	0.840	0.640
1970	0.956	0.890
1530	0.992	0.980
1060	0.999	0.998
700	0.995	0.988
660	0.994	0.985
620	0.993	0.983
580	0.992	0.981
546	0.989	0.973
500	0.978	0.950
460	0.962	0.910
436	0.940	0.860
420	0.920	0.810
405	0.860	0.690
400	0.830	0.630
390	0.700	0.410
380	0.420	0.110
370	0.060	0.000
365	0.000	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	40/37

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.2042
$P_{C,s}$	0.4568
$P_{d,C}$	0.2855
$P_{e,d}$	0.2353
$P_{g,F}$	0.6216
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2005
$P'_{C',s}$	0.4922
$P'_{d,C'}$	0.2369
$P'_{e,d}$	0.2311
$P'_{g,F'}$	0.5493
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0032
$\Delta P_{C,s}$	-0.0015
$\Delta P_{F,e}$	0.0033
$\Delta P_{g,F}$	0.0178
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.9
T_g [°C]	629
$T_{10^{13}}$ [°C]	616
$T_{10^{7.6}}$ [°C]	716
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.990
ρ [g/cm^3]	3.53
E [10^3 N/mm^2]	96
µ	0.260
K [10^{-6} mm^2/N]	2.78
$HK_{0.1/20}$	520
HG	4
Abrasion Aa	175

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.5	1.7	4.9	-2.9	-0.8	2.3
+20/+40	-0.5	2.2	6.0	-2.1	0.6	4.3
+60/+80	-0.4	2.6	6.9	-1.6	1.3	5.6

Datasheet

SCHOTT
glass made of ideas

N-SF66
923209.400

n_d = 1.92286	ν_d = 20.88	$n_F - n_C$ = 0.044199
n_e = 1.93322	ν_e = 20.70	$n_{F'} - n_{C'}$ = 0.045076

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.84839
$n_{1970.1}$	1970.1	1.85665
$n_{1529.6}$	1529.6	1.86650
$n_{1060.0}$	1060.0	1.87999
n_t	1014.0	1.88189
n_s	852.1	1.89064
n_r	706.5	1.90368
n_C	656.3	1.91039
$n_{C'}$	643.8	1.91232
$n_{632.8}$	632.8	1.91414
n_D	589.3	1.92248
n_d	587.6	1.92286
n_e	546.1	1.93322
n_F	486.1	1.95459
$n_{F'}$	480.0	1.95739
n_g	435.8	1.98285
n_h	404.7	
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.024597600
B_2	0.470187196
B_3	2.599704330
C_1	0.014705323
C_2	0.0692998276
C_3	161.81760100

Constants of Formula for dn/dT

D_0	-4.30E-06
D_1	1.15E-08
D_2	4.31E-11
E_0	9.62E-07
E_1	1.62E-09
λ_{TK} [µm]	0.322

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.79	0.56
2325	0.84	0.64
1970	0.95	0.87
1530	0.989	0.973
1060	0.996	0.991
700	0.991	0.977
660	0.987	0.968
620	0.983	0.958
580	0.976	0.94
546	0.963	0.91
500	0.93	0.83
460	0.89	0.74
436	0.83	0.63
420	0.76	0.50
405	0.59	0.27
400	0.50	0.18
390	0.25	0.02
380	0.04	
370	0.00	
365	0.00	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	45/38

Remarks

Relative Partial Dispersion P

$P_{s,t}$	0.1980
$P_{C,s}$	0.4467
$P_{d,C}$	0.2822
$P_{e,d}$	0.2345
$P_{g,F}$	0.6394
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1941
$P'_{C',s}$	0.4808
$P'_{d,C'}$	0.2339
$P'_{e,d}$	0.2299
$P'_{g,F'}$	0.5647
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0007
$\Delta P_{C,s}$	-0.0048
$\Delta P_{F,e}$	0.0059
$\Delta P_{g,F}$	0.0307
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	5.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.8
T_g [°C]	710
$T_{10^{13}}$ [°C]	719
$T_{10^{7.6}}$ [°C]	800
c_p [J/(g*K)]	0.540
λ [W/(m•K)]	0.800
ρ [g/cm³]	4.00
E [10^3 N/mm²]	95
µ	0.259
K [10^{-6} mm²/N]	2.91
$HK_{0.1/20}$	440
HG	3

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.4	1.9	5.8	-2.9	-0.7	3.1
+20/+40	-0.5	2.4	7.3	-2.1	0.8	5.5
+60/+80	0.1	3.4	8.9	-1.2	2.1	7.5

Datasheet

SCHOTT
glass made of ideas

P-SF8
689313.290

n_d = 1.68893	ν_d = 31.25	$n_F - n_C$ = 0.022046
n_e = 1.69414	ν_e = 31.01	$n_{F'} - n_{C'}$ = 0.022386

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.64480
$n_{1970.1}$	1970.1	1.65079
$n_{1529.6}$	1529.6	1.65760
$n_{1060.0}$	1060.0	1.66598
n_t	1014.0	1.66708
n_s	852.1	1.67200
n_r	706.5	1.67901
n_C	656.3	1.68252
$n_{C'}$	643.8	1.68353
$n_{632.8}$	632.8	1.68447
n_D	589.3	1.68874
n_d	587.6	1.68893
n_e	546.1	1.69414
n_F	486.1	1.70457
$n_{F'}$	480.0	1.70591
n_g	435.8	1.71778
n_h	404.7	1.72950
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.553704110
B_2	0.206332561
B_3	1.397088310
C_1	0.011658267
C_2	0.0582087757
C_3	130.74802800

Constants of Formula for dn/dT

D_0	-4.27E-06
D_1	8.16E-09
D_2	-2.00E-11
E_0	9.02E-07
E_1	1.22E-09
λ_{TK} [µm]	0.272

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.730	0.450
2325	0.800	0.570
1970	0.940	0.850
1530	0.991	0.977
1060	0.999	0.997
700	0.995	0.988
660	0.994	0.984
620	0.994	0.984
580	0.995	0.987
546	0.994	0.986
500	0.989	0.972
460	0.980	0.950
436	0.971	0.930
420	0.959	0.900
405	0.940	0.850
400	0.920	0.820
390	0.870	0.710
380	0.750	0.480
370	0.470	0.150
365	0.260	0.040
350	0.000	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/36

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2229
$P_{C,s}$	0.4776
$P_{d,C}$	0.2905
$P_{e,d}$	0.2362
$P_{g,F}$	0.5991
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2195
$P'_{C',s}$	0.5150
$P'_{d,C'}$	0.2414
$P'_{e,d}$	0.2326
$P'_{g,F'}$	0.5301
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0072
$\Delta P_{C,s}$	0.0018
$\Delta P_{F,e}$	0.0013
$\Delta P_{g,F}$	0.0079
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	11.1
T_g [°C]	524
$T_{10^{13}}$ [°C]	531
$T_{10^{7.6}}$ [°C]	629
c_p [J/(g*K)]	0.790
λ [W/(m•K)]	1.020
AT [°C]	580
ρ [g/cm³]	2.90
E [10^3 N/mm²]	86
µ	0.253
K [10^{-6} mm²/N]	2.73
$HK_{0.1/20}$	533
Abrasion Aa	200

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-0.2	1.3	3.2	-2.4	-1.0	0.8
+20/+40	-0.3	1.5	3.7	-1.7	0.0	2.2
+60/+80	-0.3	1.7	4.1	-1.4	0.5	3.0

Datasheet

P-SF68
005210.619

n_d = 2.00520 ν_d = 21.00 $n_F - n_C$ = 0.047867
n_e = 2.01643 ν_e = 20.82 $n_{F'} - n_{C'}$ = 0.048826

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.93381
$n_{1970.1}$	1970.1	1.93968
$n_{1529.6}$	1529.6	1.94732
$n_{1060.0}$	1060.0	1.95970
n_t	1014.0	1.96160
n_s	852.1	1.97063
n_r	706.5	1.98449
n_C	656.3	1.99171
$n_{C'}$	643.8	1.99380
$n_{632.8}$	632.8	1.99576
n_D	589.3	2.00479
n_d	587.6	2.00520
n_e	546.1	2.01643
n_F	486.1	2.03958
$n_{F'}$	480.0	2.04262
n_g	435.8	2.07018
n_h	404.7	
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	2.333006700
B_2	0.452961396
B_3	1.251723390
C_1	0.016883842
C_2	0.0716086325
C_3	118.70747900

Constants of Formula for dn/dT

D_0	1.55E-05
D_1	2.30E-08
D_2	-3.46E-11
E_0	2.76E-06
E_1	2.93E-09
λ_{TK} [µm]	0.297

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.790	0.560
2325	0.910	0.780
1970	0.976	0.940
1530	0.996	0.990
1060	0.999	0.998
700	0.997	0.993
660	0.996	0.989
620	0.994	0.985
580	0.989	0.973
546	0.976	0.940
500	0.910	0.780
460	0.760	0.500
436	0.570	0.250
420	0.300	0.050
405	0.040	0.000
400	0.010	
390	0.000	
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	49/41

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.1885
$P_{C,s}$	0.4406
$P_{d,C}$	0.2817
$P_{e,d}$	0.2346
$P_{g,F}$	0.6392
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1848
$P'_{C',s}$	0.4746
$P'_{d,C'}$	0.2336
$P'_{e,d}$	0.2300
$P'_{g,F'}$	0.5644
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0156
$\Delta P_{C,s}$	-0.0113
$\Delta P_{F,e}$	0.0063
$\Delta P_{g,F}$	0.0308
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	5
SR	53.3
AR	1-2,3
PR	2.3
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.7
T_g [°C]	428
$T_{10^{13}}$ [°C]	430
$T_{10^{7.6}}$ [°C]	504
c_p [J/(g*K)]	0.370
λ [W/(m•K)]	0.650
AT [°C]	468
ρ [g/cm³]	6.19
E [10^3 N/mm²]	79
µ	0.275
K [10^{-6} mm²/N]	1.61
$HK_{0.1/20}$	404
Abrasion Aa	298

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	13.7	21.5	32.3	11.1	18.8	29.5
+20/+40	15.2	24.1	36.5	13.5	22.3	34.6
+60/+80	16.2	25.8	39.1	15.4	25.3	39.2

Datasheet

P-SF69
723292.293

n_d = 1.72250 ν_d = 29.23 $n_F - n_C$ = 0.024718
n_e = 1.72833 ν_e = 29.00 $n_{F'} - n_{C'}$ = 0.025116

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67440
$n_{1970.1}$	1970.1	1.68073
$n_{1529.6}$	1529.6	1.68797
$n_{1060.0}$	1060.0	1.69705
n_t	1014.0	1.69826
n_s	852.1	1.70367
n_r	706.5	1.71144
n_C	656.3	1.71535
$n_{C'}$	643.8	1.71647
$n_{632.8}$	632.8	1.71752
n_D	589.3	1.72229
n_d	587.6	1.72250
n_e	546.1	1.72833
n_F	486.1	1.74007
$n_{F'}$	480.0	1.74158
n_g	435.8	1.75502
n_h	404.7	1.76840
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.625946470
B_2	0.235927609
B_3	1.674346230
C_1	0.012169668
C_2	0.0600710405
C_3	145.65190800

Constants of Formula for dn/dT

D_0	-2.55E-06
D_1	5.68E-09
D_2	-2.85E-11
E_0	9.50E-07
E_1	1.54E-09
λ_{TK} [µm]	0.275

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.800	0.580
2325	0.860	0.680
1970	0.954	0.890
1530	0.993	0.983
1060	0.999	0.998
700	0.998	0.994
660	0.997	0.993
620	0.997	0.993
580	0.998	0.994
546	0.997	0.992
500	0.993	0.983
460	0.985	0.964
436	0.976	0.940
420	0.963	0.910
405	0.930	0.840
400	0.920	0.800
390	0.850	0.660
380	0.690	0.390
370	0.360	0.080
365	0.160	0.010
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2188
$P_{C,s}$	0.4727
$P_{d,C}$	0.2893
$P_{e,d}$	0.2360
$P_{g,F}$	0.6050
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2153
$P'_{C',s}$	0.5096
$P'_{d,C'}$	0.2403
$P'_{e,d}$	0.2322
$P'_{g,F'}$	0.5352
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0078
$\Delta P_{C,s}$	0.0016
$\Delta P_{F,e}$	0.0017
$\Delta P_{g,F}$	0.0104
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	11.1
T_g [°C]	508
$T_{10^{13}}$ [°C]	508
$T_{10^{7.6}}$ [°C]	602
c_p [J/(g*K)]	0.820
λ [W/(m•K)]	1.120
AT [°C]	547
ρ [g/cm³]	2.93
E [10^3 N/mm²]	96
µ	0.251
K [10^{-6} mm²/N]	2.66
$HK_{0.1/20}$	612
Abrasion Aa	142

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.9	2.5	4.6	-1.4	0.1	2.1
+20/+40	0.6	2.6	5.2	-0.8	1.1	3.6
+60/+80	0.5	2.8	5.6	-0.6	1.6	4.4

Datasheet

SF1
717295.446

$n_d = 1.71736$ $\nu_d = 29.51$ $n_F - n_C = 0.024307$
$n_e = 1.72310$ $\nu_e = 29.29$ $n_{F'} - n_{C'} = 0.024687$

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67352
$n_{1970.1}$	1970.1	1.67855
$n_{1529.6}$	1529.6	1.68449
$n_{1060.0}$	1060.0	1.69258
n_t	1014.0	1.69371
n_s	852.1	1.69888
n_r	706.5	1.70647
n_C	656.3	1.71031
$n_{C'}$	643.8	1.71141
$n_{632.8}$	632.8	1.71245
n_D	589.3	1.71715
n_d	587.6	1.71736
n_e	546.1	1.72310
n_F	486.1	1.73462
$n_{F'}$	480.0	1.73610
n_g	435.8	1.74916
n_h	404.7	1.76201
n_i	365.0	1.78580
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.559129230
B_2	0.284246288
B_3	0.968842926
C_1	0.012148100
C_2	0.0534549042
C_3	112.17480900

Constants of Formula for dn/dT

D_0	4.84E-06
D_1	1.70E-08
D_2	-4.52E-11
E_0	1.38E-06
E_1	1.26E-09
λ_{TK} [µm]	0.259

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.840	0.650
2325	0.880	0.730
1970	0.959	0.900
1530	0.994	0.985
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.997	0.993
460	0.994	0.984
436	0.990	0.976
420	0.984	0.961
405	0.971	0.930
400	0.967	0.920
390	0.950	0.870
380	0.910	0.790
370	0.840	0.640
365	0.760	0.500
350	0.300	0.030
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	39/34

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2127
$P_{C,s}$	0.4705
$P_{d,C}$	0.2899
$P_{e,d}$	0.2364
$P_{g,F}$	0.5983
$P_{i,h}$	0.9791

Relative Partial Dispersion P'

$P'_{s,t}$	0.2094
$P'_{C',s}$	0.5078
$P'_{d,C'}$	0.2409
$P'_{e,d}$	0.2327
$P'_{g,F'}$	0.5292
$P'_{i,h}$	0.9640

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0018
$\Delta P_{C,s}$	-0.0012
$\Delta P_{F,e}$	0.0009
$\Delta P_{g,F}$	0.0042
$\Delta P_{i,g}$	0.0307

Chemical Properties

CR	2
FR	1
SR	3.2
AR	2.3
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.8
T_g [°C]	417
$T_{10^{13}}$ [°C]	415
$T_{10^{7.6}}$ [°C]	566
c_p [J/(g*K)]	0.430
λ [W/(m•K)]	0.660
ρ [g/cm³]	4.46
E [10^3 N/mm²]	56
µ	0.232
K [10^{-6} mm²/N]	1.80
$HK_{0.1/20}$	390
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.5	7.0	10.1	2.2	4.7	7.7
+20/+40	5.0	7.9	11.3	3.6	6.4	9.8
+60/+80	5.3	8.4	12.1	4.2	7.3	10.9

Datasheet

SF2
648339.386

n_d = 1.64769 ν_d = 33.85 $n_F - n_C$ = 0.019135
n_e = 1.65222 ν_e = 33.60 $n_{F'} - n_{C'}$ = 0.019412

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.61003
$n_{1970.1}$	1970.1	1.61494
$n_{1529.6}$	1529.6	1.62055
$n_{1060.0}$	1060.0	1.62766
n_t	1014.0	1.62861
n_s	852.1	1.63289
n_r	706.5	1.63902
n_C	656.3	1.64210
$n_{C'}$	643.8	1.64297
$n_{632.8}$	632.8	1.64379
n_D	589.3	1.64752
n_d	587.6	1.64769
n_e	546.1	1.65222
n_F	486.1	1.66123
$n_{F'}$	480.0	1.66238
n_g	435.8	1.67249
n_h	404.7	1.68233
n_i	365.0	1.70027
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.403018210
B_2	0.231767504
B_3	0.939056586
C_1	0.010579547
C_2	0.0493226978
C_3	112.40595500

Constants of Formula for dn/dT

D_0	1.10E-06
D_1	1.75E-08
D_2	-1.29E-11
E_0	1.08E-06
E_1	1.03E-09
λ_{TK} [µm]	0.249

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.830	0.620
2325	0.870	0.710
1970	0.950	0.880
1530	0.994	0.985
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.994
620	0.998	0.995
580	0.998	0.995
546	0.998	0.995
500	0.997	0.993
460	0.995	0.988
436	0.993	0.982
420	0.990	0.975
405	0.985	0.962
400	0.981	0.954
390	0.967	0.920
380	0.950	0.870
370	0.910	0.790
365	0.880	0.720
350	0.670	0.370
334	0.110	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/33

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2233
$P_{C,s}$	0.4813
$P_{d,C}$	0.2923
$P_{e,d}$	0.2367
$P_{g,F}$	0.5886
$P_{i,h}$	0.9376

Relative Partial Dispersion P'

$P'_{s,t}$	0.2201
$P'_{C',s}$	0.5196
$P'_{d,C'}$	0.2430
$P'_{e,d}$	0.2334
$P'_{g,F'}$	0.5209
$P'_{i,h}$	0.9242

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0009
$\Delta P_{C,s}$	-0.0005
$\Delta P_{F,e}$	0.0004
$\Delta P_{g,F}$	0.0017
$\Delta P_{i,g}$	0.0112

Chemical Properties

CR	1
FR	0
SR	2
AR	2.3
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	441
$T_{10^{13}}$ [°C]	428
$T_{10^{7.6}}$ [°C]	600
c_p [J/(g*K)]	0.498
λ [W/(m•K)]	0.735
ρ [g/cm³]	3.86
E [10^3 N/mm²]	55
µ	0.227
K [10^{-6} mm²/N]	2.62
$HK_{0.1/20}$	410
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.3	4.0	6.0	0.1	1.8	3.7
+20/+40	2.7	4.6	6.9	1.3	3.2	5.4
+60/+80	3.1	5.2	7.6	2.0	4.1	6.4

Datasheet

SF3
740282.464

n_d = 1.74000	ν_d = 28.20	$n_F - n_C$ = 0.026244
n_e = 1.74620	ν_e = 27.98	$n_{F'} - n_{C'}$ = 0.026667

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.69410
$n_{1970.1}$	1970.1	1.69910
$n_{1529.6}$	1529.6	1.70511
$n_{1060.0}$	1060.0	1.71350
n_t	1014.0	1.71469
n_s	852.1	1.72017
n_r	706.5	1.72829
n_C	656.3	1.73242
$n_{C'}$	643.8	1.73360
$n_{632.8}$	632.8	1.73471
n_D	589.3	1.73977
n_d	587.6	1.74000
n_e	546.1	1.74620
n_F	486.1	1.75866
$n_{F'}$	480.0	1.76027
n_g	435.8	1.77446
n_h	404.7	1.78846
n_i	365.0	1.81452
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.572305420
B_2	0.339661149
B_3	1.035937120
C_1	0.012038218
C_2	0.0531603583
C_3	120.00538100

Constants of Formula for dn/dT

D_0	3.72E-06
D_1	1.74E-08
D_2	-3.21E-11
E_0	1.49E-06
E_1	1.41E-09
λ_{TK} [µm]	0.260

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500		
2325	0.900	0.760
1970	0.963	0.910
1530	0.994	0.986
1060	0.998	0.995
700	0.999	0.998
660	0.999	0.997
620	0.999	0.997
580	0.998	0.995
546	0.997	0.993
500	0.996	0.990
460	0.991	0.977
436	0.984	0.960
420	0.971	0.930
405	0.950	0.880
400	0.940	0.860
390	0.910	0.780
380	0.840	0.650
370	0.730	0.460
365	0.650	0.340
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/35

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2090
$P_{C,s}$	0.4665
$P_{d,C}$	0.2890
$P_{e,d}$	0.2362
$P_{g,F}$	0.6020
$P_{i,h}$	0.9929

Relative Partial Dispersion P'

$P'_{s,t}$	0.2057
$P'_{C',s}$	0.5034
$P'_{d,C'}$	0.2401
$P'_{e,d}$	0.2325
$P'_{g,F'}$	0.5323
$P'_{i,h}$	0.9772

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0032
$\Delta P_{C,s}$	-0.0021
$\Delta P_{F,e}$	0.0012
$\Delta P_{g,F}$	0.0056
$\Delta P_{i,g}$	0.0386

Chemical Properties

CR	1
FR	2
SR	4.3
AR	2.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.5
T_g [°C]	415
$T_{10^{13}}$ [°C]	404
$T_{10^{7.6}}$ [°C]	548
c_p [J/(g*K)]	0.423
λ [W/(m•K)]	0.706
ρ [g/cm³]	4.64
E [10^3 N/mm²]	56
µ	0.236
K [10^{-6} mm²/N]	1.53
$HK_{0.1/20}$	380

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.0	6.8	10.2	1.7	4.5	7.7
+20/+40	4.6	7.8	11.5	3.1	6.2	10.0
+60/+80	5.0	8.4	12.4	3.8	7.2	11.2

Datasheet

SCHOTT
glass made of ideas

SF4
755276.479

n_d = 1.75520	ν_d = 27.58	$n_F - n_C$ = 0.027383
n_e = 1.76167	ν_e = 27.37	$n_{F'} - n_{C'}$ = 0.027829

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.70789
$n_{1970.1}$	1970.1	1.71294
$n_{1529.6}$	1529.6	1.71904
$n_{1060.0}$	1060.0	1.72765
n_t	1014.0	1.72888
n_s	852.1	1.73456
n_r	706.5	1.74300
n_C	656.3	1.74730
$n_{C'}$	643.8	1.74853
$n_{632.8}$	632.8	1.74969
n_D	589.3	1.75496
n_d	587.6	1.75520
n_e	546.1	1.76167
n_F	486.1	1.77468
$n_{F'}$	480.0	1.77636
n_g	435.8	1.79121
n_h	404.7	1.80589
n_i	365.0	1.83330
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.619578260
B_2	0.339493189
B_3	1.025669310
C_1	0.012550210
C_2	0.0544559822
C_3	117.65222200

Constants of Formula for dn/dT

D_0	5.60E-06
D_1	1.70E-08
D_2	-5.27E-11
E_0	1.54E-06
E_1	1.46E-09
λ_{TK} [µm]	0.266

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.660
2325	0.890	0.740
1970	0.963	0.910
1530	0.996	0.989
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.996	0.991
460	0.992	0.980
436	0.987	0.967
420	0.980	0.950
405	0.963	0.910
400	0.954	0.890
390	0.920	0.820
380	0.860	0.690
370	0.730	0.450
365	0.600	0.280
350	0.090	
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	40/35

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2076
$P_{C,s}$	0.4650
$P_{d,C}$	0.2886
$P_{e,d}$	0.2361
$P_{g,F}$	0.6036
$P_{i,h}$	1.0012

Relative Partial Dispersion P'

$P'_{s,t}$	0.2042
$P'_{C',s}$	0.5018
$P'_{d,C'}$	0.2398
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5337
$P'_{i,h}$	0.9851

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0032
$\Delta P_{C,s}$	-0.0022
$\Delta P_{F,e}$	0.0014
$\Delta P_{g,F}$	0.0062
$\Delta P_{i,g}$	0.0443

Chemical Properties

CR	1
FR	2
SR	4.3
AR	2.3
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.9
T_g [°C]	420
$T_{10^{13}}$ [°C]	415
$T_{10^{7.6}}$ [°C]	552
c_p [J/(g*K)]	0.410
λ [W/(m•K)]	0.650
ρ [g/cm³]	4.79
E [10^3 N/mm²]	56
µ	0.241
K [10^{-6} mm²/N]	1.36
$HK_{0.1/20}$	390
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	5.1	8.1	11.8	2.8	5.7	9.4
+20/+40	5.7	9.2	13.3	4.3	7.7	11.8
+60/+80	6.0	9.7	14.2	4.9	8.5	13.0

Datasheet

SF5
673322.407

n_d = 1.67270 ν_d = 32.21 $n_F - n_C$ = 0.020885
n_e = 1.67764 ν_e = 31.97 $n_{F'} - n_{C'}$ = 0.021195

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.63289
$n_{1970.1}$	1970.1	1.63785
$n_{1529.6}$	1529.6	1.64359
$n_{1060.0}$	1060.0	1.65104
n_t	1014.0	1.65206
n_s	852.1	1.65664
n_r	706.5	1.66327
n_C	656.3	1.66661
$n_{C'}$	643.8	1.66756
$n_{632.8}$	632.8	1.66846
n_D	589.3	1.67252
n_d	587.6	1.67270
n_e	546.1	1.67764
n_F	486.1	1.68750
$n_{F'}$	480.0	1.68876
n_g	435.8	1.69986
n_h	404.7	1.71069
n_i	365.0	1.73056
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.461418850
B_2	0.247713019
B_3	0.949995832
C_1	0.011182613
C_2	0.0508594669
C_3	112.04188800

Constants of Formula for dn/dT

D_0	2.59E-06
D_1	1.76E-08
D_2	-2.03E-11
E_0	1.17E-06
E_1	1.09E-09
λ_{TK} [µm]	0.255

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.85	0.66
2325	0.89	0.74
1970	0.959	0.90
1530	0.995	0.987
1060	0.998	0.996
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.996
546	0.998	0.996
500	0.997	0.993
460	0.995	0.988
436	0.993	0.982
420	0.989	0.973
405	0.983	0.959
400	0.980	0.950
390	0.967	0.92
380	0.950	0.88
370	0.91	0.80
365	0.88	0.73
350	0.63	0.31
334	0.20	
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/33

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2194
$P_{C,s}$	0.4775
$P_{d,C}$	0.2915
$P_{e,d}$	0.2366
$P_{g,F}$	0.5919
$P_{i,h}$	0.9513

Relative Partial Dispersion P'

$P'_{s,t}$	0.2162
$P'_{C',s}$	0.5153
$P'_{d,C'}$	0.2423
$P'_{e,d}$	0.2331
$P'_{g,F'}$	0.5237
$P'_{i,h}$	0.9374

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0010
$\Delta P_{C,s}$	-0.0005
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	0.0023
$\Delta P_{i,g}$	0.0160

Chemical Properties

CR	1
FR	1
SR	2
AR	2.3
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.2
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.0
T_g [°C]	425
$T_{10^{13}}$ [°C]	421
$T_{10^{7.6}}$ [°C]	580
c_p [J/(g*K)]	0.470
λ [W/(m•K)]	0.690
ρ [g/cm³]	4.07
E [10^3 N/mm²]	56
µ	0.233
K [10^{-6} mm²/N]	2.29
$HK_{0.1/20}$	410
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.1	5.1	7.4	0.9	2.8	5.1
+20/+40	3.5	5.8	8.4	2.1	4.4	6.9
+60/+80	3.9	6.4	9.2	2.8	5.2	8.0

Datasheet

SF6
805254.518

n_d = 1.80518 ν_d = 25.43 $n_F - n_C$ = 0.031660
n_e = 1.81265 ν_e = 25.24 $n_{F'} - n_{C'}$ = 0.032201

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75302
$n_{1970.1}$	1970.1	1.75813
$n_{1529.6}$	1529.6	1.76444
$n_{1060.0}$	1060.0	1.77380
n_t	1014.0	1.77517
n_s	852.1	1.78157
n_r	706.5	1.79117
n_C	656.3	1.79609
$n_{C'}$	643.8	1.79750
$n_{632.8}$	632.8	1.79884
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81265
n_F	486.1	1.82775
$n_{F'}$	480.0	1.82970
n_g	435.8	1.84707
n_h	404.7	1.86436
n_i	365.0	1.89703
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.724484820
B_2	0.390104889
B_3	1.045728580
C_1	0.013487195
C_2	0.0569318095
C_3	118.55718500

Constants of Formula for dn/dT

D_0	6.69E-06
D_1	1.78E-08
D_2	-3.36E-11
E_0	1.77E-06
E_1	1.70E-09
λ_{TK} [µm]	0.269

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.890	0.740
2325	0.910	0.790
1970	0.971	0.930
1530	0.996	0.991
1060	0.999	0.999
700	0.999	0.997
660	0.998	0.996
620	0.998	0.995
580	0.999	0.996
546	0.998	0.996
500	0.996	0.991
460	0.991	0.978
436	0.982	0.955
420	0.967	0.920
405	0.930	0.840
400	0.920	0.800
390	0.850	0.660
380	0.720	0.440
370	0.440	0.130
365	0.250	0.030
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/36

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2020
$P_{C,s}$	0.4588
$P_{d,C}$	0.2871
$P_{e,d}$	0.2359
$P_{g,F}$	0.6102
$P_{i,h}$	1.0316

Relative Partial Dispersion P'

$P'_{s,t}$	0.1986
$P'_{C',s}$	0.4950
$P'_{d,C'}$	0.2384
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5393
$P'_{i,h}$	1.0143

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0048
$\Delta P_{C,s}$	-0.0033
$\Delta P_{F,e}$	0.0020
$\Delta P_{g,F}$	0.0092
$\Delta P_{i,g}$	0.0669

Chemical Properties

CR	2
FR	3
SR	51.3
AR	2.3
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.0
T_g [°C]	423
$T_{10^{13}}$ [°C]	410
$T_{10^{7.6}}$ [°C]	538
c_p [J/(g*K)]	0.389
λ [W/(m•K)]	0.673
ρ [g/cm³]	5.18
E [10^3 N/mm²]	55
µ	0.244
K [10^{-6} mm²/N]	0.65
$HK_{0.1/20}$	370
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.1	9.9	14.5	3.7	7.4	11.9
+20/+40	6.8	11.1	16.2	5.3	9.5	14.6
+60/+80	7.3	11.8	17.4	6.1	10.6	16.1

Datasheet

SF6HT
805254.518

n_d = 1.80518 ν_d = 25.43 $n_F - n_C$ = 0.031660
n_e = 1.81265 ν_e = 25.24 $n_{F'} - n_{C'}$ = 0.032201

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75302
$n_{1970.1}$	1970.1	1.75813
$n_{1529.6}$	1529.6	1.76444
$n_{1060.0}$	1060.0	1.77380
n_t	1014.0	1.77517
n_s	852.1	1.78157
n_r	706.5	1.79117
n_C	656.3	1.79609
$n_{C'}$	643.8	1.79750
$n_{632.8}$	632.8	1.79884
n_D	589.3	1.80491
n_d	587.6	1.80518
n_e	546.1	1.81265
n_F	486.1	1.82775
$n_{F'}$	480.0	1.82970
n_g	435.8	1.84707
n_h	404.7	1.86436
n_i	365.0	1.89703
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.724484820
B_2	0.390104889
B_3	1.045728580
C_1	0.013487195
C_2	0.0569318095
C_3	118.55718500

Constants of Formula for dn/dT

D_0	6.69E-06
D_1	1.78E-08
D_2	-3.36E-11
E_0	1.77E-06
E_1	1.70E-09
λ_{TK} [µm]	0.269

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.890	0.740
2325	0.910	0.790
1970	0.971	0.930
1530	0.996	0.991
1060	0.999	0.999
700	0.999	0.997
660	0.998	0.996
620	0.998	0.995
580	0.999	0.996
546	0.998	0.996
500	0.996	0.991
460	0.992	0.981
436	0.987	0.967
420	0.977	0.940
405	0.954	0.890
400	0.940	0.860
390	0.890	0.750
380	0.770	0.520
370	0.500	0.180
365	0.300	0.050
350	0.000	0.000
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/36

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2020
$P_{C,s}$	0.4588
$P_{d,C}$	0.2871
$P_{e,d}$	0.2359
$P_{g,F}$	0.6102
$P_{i,h}$	1.0316

Relative Partial Dispersion P'

$P'_{s,t}$	0.1986
$P'_{C',s}$	0.4950
$P'_{d,C'}$	0.2384
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5393
$P'_{i,h}$	1.0143

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0048
$\Delta P_{C,s}$	-0.0033
$\Delta P_{F,e}$	0.0020
$\Delta P_{g,F}$	0.0092
$\Delta P_{i,g}$	0.0669

Chemical Properties

CR	2
FR	3
SR	51.3
AR	2.3
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.0
T_g [°C]	423
$T_{10^{13}}$ [°C]	410
$T_{10^{7.6}}$ [°C]	538
c_p [J/(g*K)]	0.389
λ [W/(m•K)]	0.673
ρ [g/cm³]	5.18
E [10^3 N/mm²]	55
µ	0.244
K [10^{-6} mm²/N]	0.65
$HK_{0.1/20}$	370
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.1	9.9	14.5	3.7	7.4	11.9
+20/+40	6.8	11.1	16.2	5.3	9.5	14.6
+60/+80	7.3	11.8	17.4	6.1	10.6	16.1

Datasheet

SF10
728284.428

n_d = 1.72825 ν_d = 28.41 $n_F - n_C$ = 0.025633
n_e = 1.73430 ν_e = 28.19 $n_{F'} - n_{C'}$ = 0.026051

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.68218
$n_{1970.1}$	1970.1	1.68750
$n_{1529.6}$	1529.6	1.69378
$n_{1060.0}$	1060.0	1.70227
n_t	1014.0	1.70345
n_s	852.1	1.70887
n_r	706.5	1.71681
n_C	656.3	1.72085
$n_{C'}$	643.8	1.72200
$n_{632.8}$	632.8	1.72309
n_D	589.3	1.72803
n_d	587.6	1.72825
n_e	546.1	1.73430
n_F	486.1	1.74648
$n_{F'}$	480.0	1.74805
n_g	435.8	1.76198
n_h	404.7	1.77579
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.616259770
B_2	0.259229334
B_3	1.077623170
C_1	0.012753456
C_2	0.0581983954
C_3	116.60768000

Constants of Formula for dn/dT

D_0	5.31E-06
D_1	1.59E-08
D_2	-4.07E-11
E_0	1.28E-06
E_1	1.32E-09
λ_{TK} [µm]	0.270

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.860	0.690
2325	0.900	0.760
1970	0.967	0.920
1530	0.995	0.987
1060	0.999	0.997
700	0.998	0.995
660	0.997	0.993
620	0.997	0.993
580	0.998	0.995
546	0.998	0.995
500	0.996	0.989
460	0.991	0.978
436	0.984	0.961
420	0.967	0.920
405	0.910	0.790
400	0.860	0.690
390	0.670	0.370
380	0.360	0.060
370	0.080	
365	0.020	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/37

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2111
$P_{C,s}$	0.4674
$P_{d,C}$	0.2888
$P_{e,d}$	0.2361
$P_{g,F}$	0.6046
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2077
$P'_{C',s}$	0.5042
$P'_{d,C'}$	0.2399
$P'_{e,d}$	0.2323
$P'_{g,F'}$	0.5346
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0012
$\Delta P_{C,s}$	-0.0017
$\Delta P_{F,e}$	0.0017
$\Delta P_{g,F}$	0.0085
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.5
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.4
T_g [°C]	454
$T_{10^{13}}$ [°C]	445
$T_{10^{7.6}}$ [°C]	595
c_p [J/(g*K)]	0.465
λ [W/(m•K)]	0.741
ρ [g/cm³]	4.28
E [10^3 N/mm²]	64
µ	0.232
K [10^{-6} mm²/N]	1.95
$HK_{0.1/20}$	430
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.8	7.3	10.3	2.5	4.9	7.9
+20/+40	5.3	8.1	11.6	3.8	6.6	10.0
+60/+80	5.6	8.6	12.4	4.4	7.4	11.1

Datasheet

SCHOTT
glass made of ideas

SF11
785258.474

n_d = 1.78472	ν_d = 25.76	$n_F - n_C$ = 0.030467
n_e = 1.79190	ν_e = 25.55	$n_{F'} - n_{C'}$ = 0.030997

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.73294
$n_{1970.1}$	1970.1	1.73843
$n_{1529.6}$	1529.6	1.74506
$n_{1060.0}$	1060.0	1.75445
n_t	1014.0	1.75579
n_s	852.1	1.76200
n_r	706.5	1.77125
n_C	656.3	1.77599
$n_{C'}$	643.8	1.77734
$n_{632.8}$	632.8	1.77862
n_D	589.3	1.78446
n_d	587.6	1.78472
n_e	546.1	1.79190
n_F	486.1	1.80645
$n_{F'}$	480.0	1.80834
n_g	435.8	1.82518
n_h	404.7	1.84208
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.738484030
B_2	0.311168974
B_3	1.174908710
C_1	0.013606860
C_2	0.0615960463
C_3	121.92271100

Constants of Formula for dn/dT

D_0	1.12E-05
D_1	1.81E-08
D_2	-5.03E-11
E_0	1.46E-06
E_1	1.58E-09
λ_{TK} [µm]	0.282

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.820	0.610
2325	0.870	0.700
1970	0.971	0.930
1530	0.993	0.982
1060	0.999	0.997
700	0.997	0.993
660	0.996	0.991
620	0.996	0.991
580	0.996	0.991
546	0.996	0.989
500	0.990	0.976
460	0.976	0.940
436	0.940	0.860
420	0.870	0.700
405	0.650	0.340
400	0.530	0.200
390	0.180	0.010
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	44/39

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2039
$P_{C,s}$	0.4590
$P_{d,C}$	0.2866
$P_{e,d}$	0.2356
$P_{g,F}$	0.6147
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2004
$P'_{C',s}$	0.4949
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2316
$P'_{g,F'}$	0.5433
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0043
$\Delta P_{C,s}$	-0.0040
$\Delta P_{F,e}$	0.0029
$\Delta P_{g,F}$	0.0142
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.2
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.1
$\alpha_{+20/+300°C}$ [10^{-6}/K]	6.8
T_g [°C]	503
$T_{10^{13}}$ [°C]	500
$T_{10^{7.6}}$ [°C]	635
c_p [J/(g*K)]	0.431
λ [W/(m•K)]	0.737
ρ [g/cm³]	4.74
E [10^3 N/mm²]	66
µ	0.235
K [10^{-6} mm²/N]	1.33
$HK_{0.1/20}$	450
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	8.4	11.7	15.8	6.1	9.2	13.3
+20/+40	9.2	12.9	17.6	7.7	11.3	16.0
+60/+80	9.6	13.6	18.7	8.4	12.4	17.4

Datasheet

SF56A
785261.492

n_d = 1.78470 ν_d = 26.08 $n_F - n_C$ = 0.030092
n_e = 1.79180 ν_e = 25.87 $n_{F'} - n_{C'}$ = 0.030603

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.73406
$n_{1970.1}$	1970.1	1.73925
$n_{1529.6}$	1529.6	1.74559
$n_{1060.0}$	1060.0	1.75473
n_t	1014.0	1.75606
n_s	852.1	1.76220
n_r	706.5	1.77136
n_C	656.3	1.77605
$n_{C'}$	643.8	1.77740
$n_{632.8}$	632.8	1.77866
n_D	589.3	1.78444
n_d	587.6	1.78470
n_e	546.1	1.79180
n_F	486.1	1.80615
$n_{F'}$	480.0	1.80800
n_g	435.8	1.82449
n_h	404.7	1.84092
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.705792590
B_2	0.344223052
B_3	1.096018280
C_1	0.013387470
C_2	0.0579561608
C_3	121.61602400

Constants of Formula for dn/dT

D_0	6.02E-06
D_1	1.70E-08
D_2	-2.61E-11
E_0	1.63E-06
E_1	1.59E-09
λ_{TK} [µm]	0.269

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.870	0.700
2325	0.900	0.760
1970	0.967	0.920
1530	0.996	0.989
1060	0.999	0.997
700	0.998	0.995
660	0.997	0.993
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.996	0.989
460	0.990	0.974
436	0.980	0.950
420	0.959	0.900
405	0.900	0.760
400	0.860	0.680
390	0.700	0.410
380	0.400	0.100
370	0.120	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	42/37

Remarks

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2040
$P_{C,s}$	0.4605
$P_{d,C}$	0.2874
$P_{e,d}$	0.2359
$P_{g,F}$	0.6098
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2006
$P'_{C',s}$	0.4967
$P'_{d,C'}$	0.2387
$P'_{e,d}$	0.2319
$P'_{g,F'}$	0.5390
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0042
$\Delta P_{C,s}$	-0.0032
$\Delta P_{F,e}$	0.0021
$\Delta P_{g,F}$	0.0098
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	1
SR	3.2
AR	2.2
PR	3.2

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.9
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.8
T_g [°C]	429
$T_{10^{13}}$ [°C]	426
$T_{10^{7.6}}$ [°C]	556
c_p [J/(g*K)]	0.400
λ [W/(m•K)]	0.690
ρ [g/cm³]	4.92
E [10^3 N/mm²]	57
µ	0.239
K [10^{-6} mm²/N]	1.10
$HK_{0.1/20}$	380
HG	1

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	5.6	9.0	13.1	3.3	6.6	10.6
+20/+40	6.2	10.0	14.7	4.7	8.5	13.1
+60/+80	6.6	10.7	15.8	5.5	9.5	14.5

Datasheet

SF57
847238.551

n_d = 1.84666 ν_d = 23.83 $n_F - n_C$ = 0.035536
n_e = 1.85504 ν_e = 23.64 $n_{F'} - n_{C'}$ = 0.036166

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.79026
$n_{1970.1}$	1970.1	1.79539
$n_{1529.6}$	1529.6	1.80187
$n_{1060.0}$	1060.0	1.81185
n_t	1014.0	1.81335
n_s	852.1	1.82038
n_r	706.5	1.83102
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83808
$n_{632.8}$	632.8	1.83957
n_D	589.3	1.84636
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87204
$n_{F'}$	480.0	1.87425
n_g	435.8	1.89393
n_h	404.7	1.91366
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.816513710
B_2	0.428893641
B_3	1.071862780
C_1	0.014370420
C_2	0.0592801172
C_3	121.41994200

Constants of Formula for dn/dT

D_0	7.26E-06
D_1	1.88E-08
D_2	-5.14E-11
E_0	1.96E-06
E_1	1.79E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.890	0.750
2325	0.910	0.790
1970	0.971	0.930
1530	0.996	0.991
1060	0.999	0.997
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.994	0.986
460	0.987	0.968
436	0.971	0.930
420	0.940	0.860
405	0.880	0.730
400	0.850	0.660
390	0.730	0.450
380	0.520	0.200
370	0.160	0.010
365	0.040	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	40/37

Remarks

lead containing glass type

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.1976
$P_{C,s}$	0.4539
$P_{d,C}$	0.2859
$P_{e,d}$	0.2356
$P_{g,F}$	0.6160
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1942
$P'_{C',s}$	0.4895
$P'_{d,C'}$	0.2373
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0065
$\Delta P_{C,s}$	-0.0046
$\Delta P_{F,e}$	0.0026
$\Delta P_{g,F}$	0.0123
$\Delta P_{i,g}$	

Chemical Properties

CR	2
FR	5
SR	52.3
AR	2.3
PR	4.3
SR-J	6
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	414
$T_{10^{13}}$ [°C]	414
$T_{10^{7.6}}$ [°C]	507
c_p [J/(g*K)]	0.360
λ [W/(m•K)]	0.620
AT [°C]	449
ρ [g/cm^3]	5.51
E [10^3 N/mm^2]	54
µ	0.248
K [10^{-6} mm^2/N]	0.02
$HK_{0.1/20}$	350
HG	1
Abrasion Aa	344

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.6	11.1	16.7	4.2	8.6	14.1
+20/+40	7.6	12.5	18.9	6.0	10.9	17.2
+60/+80	8.0	13.4	20.1	6.8	12.1	18.8

Datasheet

SF57HTultra
847238.551

n_d = 1.84666	ν_d = 23.83	$n_F - n_C$ = 0.035536
n_e = 1.85504	ν_e = 23.64	$n_{F'} - n_{C'}$ = 0.036166

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.79026
$n_{1970.1}$	1970.1	1.79539
$n_{1529.6}$	1529.6	1.80187
$n_{1060.0}$	1060.0	1.81185
n_t	1014.0	1.81335
n_s	852.1	1.82038
n_r	706.5	1.83102
n_C	656.3	1.83650
$n_{C'}$	643.8	1.83808
$n_{632.8}$	632.8	1.83957
n_D	589.3	1.84636
n_d	587.6	1.84666
n_e	546.1	1.85504
n_F	486.1	1.87204
$n_{F'}$	480.0	1.87425
n_g	435.8	1.89393
n_h	404.7	1.91366
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.816513710
B_2	0.428893641
B_3	1.071862780
C_1	0.014370420
C_2	0.0592801172
C_3	121.41994200

Constants of Formula for dn/dT

D_0	7.26E-06
D_1	1.88E-08
D_2	-5.14E-11
E_0	1.96E-06
E_1	1.79E-09
λ_{TK} [µm]	0.276

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.91	0.80
2325	0.93	0.84
1970	0.980	0.951
1530	0.998	0.994
1060	0.999	0.999
700	0.999	0.997
660	0.998	0.996
620	0.998	0.996
580	0.998	0.996
546	0.998	0.995
500	0.996	0.989
460	0.991	0.978
436	0.985	0.962
420	0.971	0.93
405	0.94	0.86
400	0.92	0.82
390	0.83	0.63
380	0.62	0.30
370	0.25	0.03
365	0.10	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	39/36

Remarks

lead containing glass type

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.1976
$P_{C,s}$	0.4539
$P_{d,C}$	0.2859
$P_{e,d}$	0.2356
$P_{g,F}$	0.6160
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1942
$P'_{C',s}$	0.4895
$P'_{d,C'}$	0.2373
$P'_{e,d}$	0.2315
$P'_{g,F'}$	0.5443
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0065
$\Delta P_{C,s}$	-0.0046
$\Delta P_{F,e}$	0.0026
$\Delta P_{g,F}$	0.0123
$\Delta P_{i,g}$	

Chemical Properties

CR	2
FR	5
SR	52.3
AR	2.3
PR	4.3
SR-J	6
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	8.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.2
T_g [°C]	414
$T_{10^{13}}$ [°C]	414
$T_{10^{7.6}}$ [°C]	507
c_p [J/(g*K)]	0.360
λ [W/(m•K)]	0.620
AT [°C]	449
ρ [g/cm^3]	5.51
E [10^3 N/mm^2]	54
µ	0.248
K [10^{-6} mm^2/N]	0.02
$HK_{0.1/20}$	350
HG	1
Abrasion Aa	344

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.6	11.1	16.7	4.2	8.6	14.1
+20/+40	7.6	12.5	18.9	6.0	10.9	17.2
+60/+80	8.0	13.4	20.1	6.8	12.1	18.8

Datasheet

SCHOTT
glass made of ideas

N-KZFS11
638424.320

n_d = 1.63775	ν_d = 42.41	$n_F - n_C$ = 0.015038
n_e = 1.64132	ν_e = 42.20	$n_{F'} - n_{C'}$ = 0.015198

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.59699
$n_{1970.1}$	1970.1	1.60439
$n_{1529.6}$	1529.6	1.61223
$n_{1060.0}$	1060.0	1.62044
n_t	1014.0	1.62139
n_s	852.1	1.62540
n_r	706.5	1.63069
n_C	656.3	1.63324
$n_{C'}$	643.8	1.63395
$n_{632.8}$	632.8	1.63462
n_D	589.3	1.63762
n_d	587.6	1.63775
n_e	546.1	1.64132
n_F	486.1	1.64828
$n_{F'}$	480.0	1.64915
n_g	435.8	1.65670
n_h	404.7	1.66385
n_i	365.0	1.67636
$n_{334.1}$	334.1	1.69037
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.332224500
B_2	0.289241610
B_3	1.151617340
C_1	0.008402985
C_2	0.0344239720
C_3	88.43105320

Constants of Formula for dn/dT

D_0	3.34E-06
D_1	1.16E-08
D_2	-1.80E-11
E_0	6.32E-07
E_1	7.21E-10
λ_{TK} [µm]	0.206

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.510	0.180
2325	0.780	0.540
1970	0.965	0.910
1530	0.991	0.977
1060	0.999	0.999
700	0.998	0.994
660	0.997	0.992
620	0.997	0.992
580	0.997	0.992
546	0.997	0.993
500	0.996	0.989
460	0.993	0.982
436	0.991	0.978
420	0.990	0.975
405	0.988	0.971
400	0.987	0.968
390	0.983	0.957
380	0.976	0.940
370	0.963	0.910
365	0.950	0.880
350	0.880	0.730
334	0.730	0.450
320	0.470	0.150
310	0.230	0.020
300	0.050	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/30

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2664
$P_{C,s}$	0.5212
$P_{d,C}$	0.3000
$P_{e,d}$	0.2377
$P_{g,F}$	0.5605
$P_{i,h}$	0.8319

Relative Partial Dispersion P'

$P'_{s,t}$	0.2636
$P'_{C',s}$	0.5627
$P'_{d,C'}$	0.2499
$P'_{e,d}$	0.2352
$P'_{g,F'}$	0.4971
$P'_{i,h}$	0.8232

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0415
$\Delta P_{C,s}$	0.0194
$\Delta P_{F,e}$	-0.0039
$\Delta P_{g,F}$	-0.0120
$\Delta P_{i,g}$	-0.0617

Chemical Properties

CR	1
FR	1
SR	3.4
AR	1
PR	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.6
T_g [°C]	551
$T_{10^{13}}$ [°C]	554
$T_{10^{7.6}}$ [°C]	
c_p [J/(g*K)]	0.690
λ [W/(m•K)]	0.810
ρ [g/cm³]	3.20
E [10^3 N/mm²]	79
µ	0.251
K [10^{-6} mm²/N]	4.21
$HK_{0.1/20}$	530
HG	3
Abrasion Aa	74

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.5	4.4	5.4	1.3	2.2	3.1
+20/+40	3.5	4.6	5.7	2.1	3.1	4.2
+60/+80	3.6	4.8	6.0	2.5	3.7	4.8

Datasheet

N-KZFS2
558540.254

n_d = 1.55836 ν_d = 54.01 $n_F - n_C$ = 0.010338
n_e = 1.56082 ν_e = 53.83 $n_{F'} - n_{C'}$ = 0.010418

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.52239
$n_{1970.1}$	1970.1	1.53011
$n_{1529.6}$	1529.6	1.53798
$n_{1060.0}$	1060.0	1.54546
n_t	1014.0	1.54625
n_s	852.1	1.54944
n_r	706.5	1.55337
n_C	656.3	1.55519
$n_{C'}$	643.8	1.55570
$n_{632.8}$	632.8	1.55617
n_D	589.3	1.55827
n_d	587.6	1.55836
n_e	546.1	1.56082
n_F	486.1	1.56553
$n_{F'}$	480.0	1.56612
n_g	435.8	1.57114
n_h	404.7	1.57580
n_i	365.0	1.58382
$n_{334.1}$	334.1	1.59259
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.236975540
B_2	0.153569376
B_3	0.903976272
C_1	0.007471705
C_2	0.0308053556
C_3	70.17310840

Constants of Formula for dn/dT

D_0	6.77E-06
D_1	1.31E-08
D_2	-1.23E-11
E_0	3.84E-07
E_1	5.51E-10
λ_{TK} [µm]	0.196

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.28	0.04
2325	0.58	0.26
1970	0.91	0.80
1530	0.976	0.94
1060	0.996	0.991
700	0.998	0.996
660	0.998	0.994
620	0.998	0.994
580	0.998	0.994
546	0.998	0.994
500	0.997	0.992
460	0.995	0.987
436	0.992	0.981
420	0.990	0.975
405	0.987	0.967
400	0.985	0.963
390	0.980	0.950
380	0.971	0.93
370	0.963	0.91
365	0.954	0.89
350	0.91	0.80
334	0.81	0.59
320	0.57	0.24
310	0.25	0.03
300	0.01	
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	34/30

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.3080
$P_{C,s}$	0.5568
$P_{d,C}$	0.3061
$P_{e,d}$	0.2383
$P_{g,F}$	0.5419
$P_{i,h}$	0.7758

Relative Partial Dispersion P'

$P'_{s,t}$	0.3056
$P'_{C',s}$	0.6011
$P'_{d,C'}$	0.2552
$P'_{e,d}$	0.2365
$P'_{g,F'}$	0.4814
$P'_{i,h}$	0.7699

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0636
$\Delta P_{C,s}$	0.0280
$\Delta P_{F,e}$	-0.0044
$\Delta P_{g,F}$	-0.0111
$\Delta P_{i,g}$	-0.0440

Chemical Properties

CR	1
FR	4
SR	52.3
AR	4.3
PR	4.2
SR-J	6
WR-J	6

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	4.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	5.4
T_g [°C]	482
$T_{10^{13}}$ [°C]	488
$T_{10^{7.6}}$ [°C]	590
c_p [J/(g*K)]	0.830
λ [W/(m•K)]	0.810
AT [°C]	533
ρ [g/cm³]	2.54
E [10^3 N/mm²]	66
µ	0.266
K [10^{-6} mm²/N]	3.98
$HK_{0.1/20}$	490
HG	3
Abrasion Aa	70

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.6	5.2	5.7	2.5	3.0	3.5
+20/+40	4.7	5.3	5.9	3.3	3.9	4.5
+60/+80	4.8	5.5	6.2	3.8	4.5	5.1

Datasheet

SCHOTT
glass made of ideas

N-KZFS4
613445.300

n_d = 1.61336 ν_d = 44.49 $n_F - n_C$ = 0.013785
n_e = 1.61664 ν_e = 44.27 $n_{F'} - n_{C'}$ = 0.013929

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57535
$n_{1970.1}$	1970.1	1.58233
$n_{1529.6}$	1529.6	1.58971
$n_{1060.0}$	1060.0	1.59739
n_t	1014.0	1.59828
n_s	852.1	1.60199
n_r	706.5	1.60688
n_C	656.3	1.60922
$n_{C'}$	643.8	1.60987
$n_{632.8}$	632.8	1.61049
n_D	589.3	1.61324
n_d	587.6	1.61336
n_e	546.1	1.61664
n_F	486.1	1.62300
$n_{F'}$	480.0	1.62380
n_g	435.8	1.63071
n_h	404.7	1.63723
n_i	365.0	1.64865
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.350554240
B_2	0.197575506
B_3	1.099629920
C_1	0.008762821
C_2	0.0371767201
C_3	90.38669940

Constants of Formula for dn/dT

D_0	1.81E-06
D_1	1.16E-08
D_2	-7.99E-12
E_0	6.20E-07
E_1	7.94E-10
λ_{TK} [µm]	0.205

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.510	0.190
2325	0.750	0.490
1970	0.951	0.880
1530	0.984	0.961
1060	0.998	0.996
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.992
500	0.995	0.987
460	0.990	0.976
436	0.987	0.968
420	0.984	0.961
405	0.981	0.952
400	0.979	0.950
390	0.971	0.930
380	0.963	0.910
370	0.940	0.860
365	0.920	0.820
350	0.820	0.600
334	0.470	0.150
320	0.040	
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/32

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2694
$P_{C,s}$	0.5240
$P_{d,C}$	0.3006
$P_{e,d}$	0.2378
$P_{g,F}$	0.5590
$P_{i,h}$	0.8284

Relative Partial Dispersion P'

$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5657
$P'_{d,C'}$	0.2503
$P'_{e,d}$	0.2353
$P'_{g,F'}$	0.4958
$P'_{i,h}$	0.8199

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0373
$\Delta P_{C,s}$	0.0173
$\Delta P_{F,e}$	-0.0033
$\Delta P_{g,F}$	-0.0100
$\Delta P_{i,g}$	-0.0496

Chemical Properties

CR	1
FR	1
SR	3.4
AR	1.2
PR	1
SR-J	6
WR-J	4

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	536
$T_{10^{13}}$ [°C]	541
$T_{10^{7.6}}$ [°C]	664
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	0.840
AT [°C]	597
ρ [g/cm^3]	3.00
E [10^3 N/mm^2]	78
µ	0.241
K [10^{-6} mm^2/N]	3.90
$HK_{0.1/20}$	520
HG	3
Abrasion Aa	130

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.7	3.5	4.4	0.5	1.3	2.2
+20/+40	2.7	3.7	4.7	1.3	2.3	3.2
+60/+80	2.8	3.9	5.0	1.7	2.8	3.9

Datasheet

SCHOTT
glass made of ideas

N-KZFS4HT
613445.300

n_d = 1.61336	ν_d = 44.49	$n_F - n_C$ = 0.013785
n_e = 1.61664	ν_e = 44.27	$n_{F'} - n_{C'}$ = 0.013929

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.57535
$n_{1970.1}$	1970.1	1.58233
$n_{1529.6}$	1529.6	1.58971
$n_{1060.0}$	1060.0	1.59739
n_t	1014.0	1.59828
n_s	852.1	1.60199
n_r	706.5	1.60688
n_C	656.3	1.60922
$n_{C'}$	643.8	1.60987
$n_{632.8}$	632.8	1.61049
n_D	589.3	1.61324
n_d	587.6	1.61336
n_e	546.1	1.61664
n_F	486.1	1.62300
$n_{F'}$	480.0	1.62380
n_g	435.8	1.63071
n_h	404.7	1.63723
n_i	365.0	1.64865
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.350554240
B_2	0.197575506
B_3	1.099629920
C_1	0.008762821
C_2	0.0371767201
C_3	90.38669940

Constants of Formula for dn/dT

D_0	1.81E-06
D_1	1.16E-08
D_2	-7.99E-12
E_0	6.20E-07
E_1	7.94E-10
λ_{TK} [µm]	0.205

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.510	0.190
2325	0.750	0.490
1970	0.951	0.880
1530	0.984	0.961
1060	0.999	0.999
700	0.998	0.994
660	0.997	0.993
620	0.997	0.992
580	0.997	0.993
546	0.997	0.993
500	0.995	0.988
460	0.992	0.980
436	0.990	0.975
420	0.988	0.971
405	0.986	0.966
400	0.985	0.962
390	0.980	0.951
380	0.973	0.930
370	0.959	0.900
365	0.950	0.870
350	0.870	0.700
334	0.550	0.220
320	0.060	0.000
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	36/32

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2694
$P_{C,s}$	0.5240
$P_{d,C}$	0.3006
$P_{e,d}$	0.2378
$P_{g,F}$	0.5590
$P_{i,h}$	0.8284

Relative Partial Dispersion P'

$P'_{s,t}$	0.2666
$P'_{C',s}$	0.5657
$P'_{d,C'}$	0.2503
$P'_{e,d}$	0.2353
$P'_{g,F'}$	0.4958
$P'_{i,h}$	0.8199

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0373
$\Delta P_{C,s}$	0.0173
$\Delta P_{F,e}$	-0.0033
$\Delta P_{g,F}$	-0.0100
$\Delta P_{i,g}$	-0.0496

Chemical Properties

CR	1
FR	1
SR	3.4
AR	1.2
PR	1
SR-J	6
WR-J	4

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	536
$T_{10^{13}}$ [°C]	541
$T_{10^{7.6}}$ [°C]	664
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	0.840
AT [°C]	597
ρ [g/cm^3]	3.00
E [10^3 N/mm^2]	78
µ	0.241
K [10^{-6} mm^2/N]	3.90
$HK_{0.1/20}$	520
HG	3
Abrasion Aa	130

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.7	3.5	4.4	0.5	1.3	2.2
+20/+40	2.7	3.7	4.7	1.3	2.3	3.2
+60/+80	2.8	3.9	5.0	1.7	2.8	3.9

Datasheet

SCHOTT
glass made of ideas

N-KZFS5
654397.304

n_d = 1.65412	ν_d = 39.70	$n_F - n_C$ = 0.016477
n_e = 1.65803	ν_e = 39.46	$n_{F'} - n_{C'}$ = 0.016675

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.61392
$n_{1970.1}$	1970.1	1.62058
$n_{1529.6}$	1529.6	1.62780
$n_{1060.0}$	1060.0	1.63577
n_t	1014.0	1.63673
n_s	852.1	1.64087
n_r	706.5	1.64649
n_C	656.3	1.64922
$n_{C'}$	643.8	1.65000
$n_{632.8}$	632.8	1.65072
n_D	589.3	1.65398
n_d	587.6	1.65412
n_e	546.1	1.65803
n_F	486.1	1.66570
$n_{F'}$	480.0	1.66667
n_g	435.8	1.67511
n_h	404.7	1.68318
n_i	365.0	1.69756
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.474607890
B_2	0.193584488
B_3	1.265899740
C_1	0.009861438
C_2	0.0445477583
C_3	106.43625800

Constants of Formula for dn/dT

D_0	4.54E-06
D_1	1.19E-08
D_2	2.93E-12
E_0	6.89E-07
E_1	8.60E-10
λ_{TK} [µm]	0.230

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.66	0.35
2325	0.83	0.62
1970	0.963	0.91
1530	0.988	0.970
1060	0.999	0.998
700	0.998	0.994
660	0.997	0.992
620	0.997	0.992
580	0.997	0.993
546	0.997	0.992
500	0.994	0.985
460	0.990	0.974
436	0.986	0.965
420	0.983	0.958
405	0.978	0.95
400	0.976	0.94
390	0.967	0.92
380	0.950	0.88
370	0.93	0.83
365	0.91	0.79
350	0.79	0.56
334	0.37	0.08
320	0.02	0.00
310	0.00	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	37/32

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2511
$P_{C,s}$	0.5070
$P_{d,C}$	0.2972
$P_{e,d}$	0.2374
$P_{g,F}$	0.5710
$P_{i,h}$	0.8729

Relative Partial Dispersion P'

$P'_{s,t}$	0.2481
$P'_{C',s}$	0.5473
$P'_{d,C'}$	0.2474
$P'_{e,d}$	0.2345
$P'_{g,F'}$	0.5060
$P'_{i,h}$	0.8625

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0248
$\Delta P_{C,s}$	0.0115
$\Delta P_{F,e}$	-0.0021
$\Delta P_{g,F}$	-0.0060
$\Delta P_{i,g}$	-0.0286

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.4
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.4
T_g [°C]	584
$T_{10^{13}}$ [°C]	593
$T_{10^{7.6}}$ [°C]	739
c_p [J/(g*K)]	0.730
λ [W/(m•K)]	0.950
AT [°C]	648
ρ [g/cm³]	3.04
E [10^3 N/mm²]	89
µ	0.243
K [10^{-6} mm²/N]	3.53
$HK_{0.1/20}$	555
Abrasion Aa	122

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	4.2	5.3	6.5	2.0	3.1	4.2
+20/+40	4.2	5.5	6.8	2.8	4.0	5.4
+60/+80	4.4	5.8	7.3	3.3	4.7	6.1

Datasheet

SCHOTT
glass made of ideas

N-KZFS8
720347.320

n_d = 1.72047	ν_d = 34.70	$n_F - n_C$ = 0.020763
n_e = 1.72539	ν_e = 34.47	$n_{F'} - n_{C'}$ = 0.021046

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.67524
$n_{1970.1}$	1970.1	1.68193
$n_{1529.6}$	1529.6	1.68939
$n_{1060.0}$	1060.0	1.69816
n_t	1014.0	1.69927
n_s	852.1	1.70416
n_r	706.5	1.71099
n_C	656.3	1.71437
$n_{C'}$	643.8	1.71532
$n_{632.8}$	632.8	1.71622
n_D	589.3	1.72029
n_d	587.6	1.72047
n_e	546.1	1.72539
n_F	486.1	1.73513
$n_{F'}$	480.0	1.73637
n_g	435.8	1.74724
n_h	404.7	1.75777
n_i	365.0	1.77690
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.626936510
B_2	0.243698760
B_3	1.620071410
C_1	0.010880863
C_2	0.0494207753
C_3	131.00916300

Constants of Formula for dn/dT

D_0	7.93E-07
D_1	6.47E-09
D_2	-5.00E-12
E_0	7.71E-07
E_1	1.01E-09
λ_{TK} [µm]	0.254

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.760	0.510
2325	0.870	0.700
1970	0.967	0.920
1530	0.993	0.983
1060	0.999	0.999
700	0.998	0.996
660	0.998	0.995
620	0.998	0.995
580	0.998	0.995
546	0.997	0.993
500	0.994	0.985
460	0.988	0.971
436	0.982	0.955
420	0.976	0.940
405	0.967	0.920
400	0.963	0.910
390	0.950	0.870
380	0.920	0.820
370	0.890	0.740
365	0.860	0.680
350	0.670	0.360
334	0.140	0.010
320	0.040	0.000
310	0.000	
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	38/33

Remarks

suitable for precision molding

step 0.5 available

Relative Partial Dispersion P

$P_{s,t}$	0.2353
$P_{C,s}$	0.4916
$P_{d,C}$	0.2940
$P_{e,d}$	0.2369
$P_{g,F}$	0.5833
$P_{i,h}$	0.9212

Relative Partial Dispersion P'

$P'_{s,t}$	0.2322
$P'_{C',s}$	0.5305
$P'_{d,C'}$	0.2445
$P'_{e,d}$	0.2337
$P'_{g,F'}$	0.5165
$P'_{i,h}$	0.9088

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0173
$\Delta P_{C,s}$	0.0078
$\Delta P_{F,e}$	-0.0011
$\Delta P_{g,F}$	-0.0021
$\Delta P_{i,g}$	-0.0048

Chemical Properties

CR	1
FR	0
SR	1
AR	1
PR	1
SR-J	1
WR-J	1

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	9.4
T_g [°C]	509
$T_{10^{13}}$ [°C]	515
$T_{10^{7.6}}$ [°C]	635
c_p [J/(g*K)]	0.760
λ [W/(m•K)]	1.050
AT [°C]	561
ρ [g/cm^3]	3.20
E [10^3 N/mm^2]	103
µ	0.248
K [10^{-6} mm^2/N]	2.94
$HK_{0.1/20}$	570
HG	4
Abrasion Aa	152

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.7	4.1	5.6	0.4	1.7	3.2
+20/+40	2.4	4.0	5.8	0.9	2.5	4.2
+60/+80	2.4	4.1	6.1	1.2	2.9	4.9

Datasheet

SCHOTT
glass made of ideas

BK7G18
520636.252

n_d = 1.51975 ν_d = 63.58 $n_F - n_C$ = 0.008174
n_e = 1.52170 ν_e = 63.36 $n_{F'} - n_{C'}$ = 0.008233

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.49203
$n_{1970.1}$	1970.1	1.49777
$n_{1529.6}$	1529.6	1.50373
$n_{1060.0}$	1060.0	1.50953
n_t	1014.0	1.51015
n_s	852.1	1.51267
n_r	706.5	1.51579
n_C	656.3	1.51724
$n_{C'}$	643.8	1.51764
$n_{632.8}$	632.8	1.51802
n_D	589.3	1.51968
n_d	587.6	1.51975
n_e	546.1	1.52170
n_F	486.1	1.52541
$n_{F'}$	480.0	1.52587
n_g	435.8	1.52981
n_h	404.7	1.53345
n_i	365.0	1.53970
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.265385420
B_2	0.014419107
B_3	1.003230280
C_1	0.008131041
C_2	0.0543303226
C_3	102.82116600

Constants of Formula for dn/dT

D_0	1.52E-06
D_1	1.37E-08
D_2	-1.26E-11
E_0	4.36E-07
E_1	4.17E-10
λ_{TK} [µm]	0.194

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.630	0.320
2325	0.780	0.540
1970	0.930	0.840
1530	0.992	0.979
1060	0.999	0.998
700	0.997	0.993
660	0.995	0.988
620	0.994	0.984
580	0.992	0.979
546	0.989	0.973
500	0.982	0.957
460	0.970	0.930
436	0.950	0.870
420	0.910	0.780
405	0.820	0.600
400	0.760	0.510
390	0.600	0.280
380	0.360	0.080
370	0.080	
365	0.020	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/37

Remarks

radiation resistant glass

Relative Partial Dispersion P

$P_{s,t}$	0.3077
$P_{C,s}$	0.5591
$P_{d,C}$	0.3071
$P_{e,d}$	0.2385
$P_{g,F}$	0.5376
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.3055
$P'_{C',s}$	0.6040
$P'_{d,C'}$	0.2561
$P'_{e,d}$	0.2368
$P'_{g,F'}$	0.4777
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0203
$\Delta P_{C,s}$	0.0080
$\Delta P_{F,e}$	-0.0006
$\Delta P_{g,F}$	0.0007
$\Delta P_{i,g}$	

Chemical Properties

CR	
FR	0
SR	1
AR	2
PR	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.2
T_g [°C]	585
$T_{10^{13}}$ [°C]	570
$T_{10^{7.6}}$ [°C]	722
c_p [J/(g*K)]	0.820
λ [W/(m•K)]	1.190
ρ [g/cm³]	2.52
E [10^3 N/mm²]	82
µ	0.205
K [10^{-6} mm²/N]	2.77
$HK_{0.1/20}$	580

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.2	2.7	3.3	0.2	0.7	1.2
+20/+40	2.2	2.8	3.4	0.9	1.5	2.1
+60/+80	2.4	3.0	3.7	1.4	2.0	2.6

Datasheet

F2G12
621366.361

n_d = 1.62072 ν_d = 36.56 $n_F - n_C$ = 0.016979
n_e = 1.62474 ν_e = 36.30 $n_{F'} - n_{C'}$ = 0.017212

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.58584
$n_{1970.1}$	1970.1	1.59051
$n_{1529.6}$	1529.6	1.59593
$n_{1060.0}$	1060.0	1.60265
n_t	1014.0	1.60353
n_s	852.1	1.60744
n_r	706.5	1.61298
n_C	656.3	1.61573
$n_{C'}$	643.8	1.61652
$n_{632.8}$	632.8	1.61725
n_D	589.3	1.62057
n_d	587.6	1.62072
n_e	546.1	1.62474
n_F	486.1	1.63271
$n_{F'}$	480.0	1.63373
n_g	435.8	1.64261
n_h	404.7	1.65121
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.347022240
B_2	0.210037763
B_3	19.535076800
C_1	0.009808506
C_2	0.0471788018
C_3	2279.15470000

Constants of Formula for dn/dT

D_0	2.19E-06
D_1	1.62E-08
D_2	-2.20E-11
E_0	9.55E-07
E_1	8.12E-10
λ_{TK} [µm]	0.250

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.84	0.65
2325	0.89	0.74
1970	0.959	0.90
1530	0.996	0.989
1060	0.999	0.997
700	0.995	0.988
660	0.994	0.984
620	0.992	0.979
580	0.989	0.972
546	0.981	0.953
500	0.967	0.92
460	0.92	0.81
436	0.80	0.58
420	0.62	0.30
405	0.35	0.07
400	0.25	0.03
390	0.12	0.00
380	0.02	
370	0.00	
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	46/39

Remarks

radiation resistant glass

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2303
$P_{C,s}$	0.4883
$P_{d,C}$	0.2937
$P_{e,d}$	0.2369
$P_{g,F}$	0.5831
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2272
$P'_{C',s}$	0.5271
$P'_{d,C'}$	0.2443
$P'_{e,d}$	0.2337
$P'_{g,F'}$	0.5163
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0002
$\Delta P_{C,s}$	0.0002
$\Delta P_{F,e}$	0.0002
$\Delta P_{g,F}$	0.0008
$\Delta P_{i,g}$	

Chemical Properties

CR	1
FR	0
SR	1
AR	1.3
PR	2.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.6
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.3
T_g [°C]	435
$T_{10^{13}}$ [°C]	438
$T_{10^{7.6}}$ [°C]	612
c_p [J/(g*K)]	0.530
λ [W/(m•K)]	0.820
ρ [g/cm³]	3.61
E [10^3 N/mm²]	58
µ	0.222
K [10^{-6} mm²/N]	2.79
$HK_{0.1/20}$	411

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	2.7	4.3	6.0	0.6	2.1	3.8
+20/+40	3.1	4.8	6.7	1.7	3.3	5.2
+60/+80	3.3	5.2	7.2	2.3	4.1	6.1

Datasheet

SCHOTT
glass made of ideas

K5G20
523568.259

n_d = 1.52344	ν_d = 56.76	$n_F - n_C$ = 0.009222
n_e = 1.52564	ν_e = 56.47	$n_{F'} - n_{C'}$ = 0.009308

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.49784
$n_{1970.1}$	1970.1	1.50236
$n_{1529.6}$	1529.6	1.50730
$n_{1060.0}$	1060.0	1.51258
n_t	1014.0	1.51319
n_s	852.1	1.51573
n_r	706.5	1.51906
n_C	656.3	1.52065
$n_{C'}$	643.8	1.52109
$n_{632.8}$	632.8	1.52151
n_D	589.3	1.52336
n_d	587.6	1.52344
n_e	546.1	1.52564
n_F	486.1	1.52987
$n_{F'}$	480.0	1.53040
n_g	435.8	1.53494
n_h	404.7	1.53919
n_i	365.0	1.54651
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.140943960
B_2	0.145001190
B_3	37.470578600
C_1	0.006949455
C_2	0.0310574444
C_3	4536.25624000

Constants of Formula for dn/dT

D_0	-2.22E-06
D_1	8.45E-09
D_2	-3.31E-11
E_0	5.44E-07
E_1	4.95E-10
λ_{TK} [µm]	0.214

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.630	0.320
2325	0.730	0.460
1970	0.900	0.760
1530	0.990	0.976
1060	0.998	0.995
700	0.997	0.992
660	0.995	0.987
620	0.994	0.985
580	0.993	0.982
546	0.990	0.976
500	0.984	0.961
460	0.971	0.930
436	0.954	0.890
420	0.920	0.820
405	0.860	0.680
400	0.820	0.610
390	0.690	0.390
380	0.440	0.130
370	0.130	0.000
365	0.030	
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	41/37

Remarks

radiation resistant glass

lead containing glass type

Relative Partial Dispersion P

$P_{s,t}$	0.2764
$P_{C,s}$	0.5327
$P_{d,C}$	0.3027
$P_{e,d}$	0.2382
$P_{g,F}$	0.5500
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2738
$P'_{C',s}$	0.5755
$P'_{d,C'}$	0.2523
$P'_{e,d}$	0.2360
$P'_{g,F'}$	0.4881
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0051
$\Delta P_{C,s}$	-0.0025
$\Delta P_{F,e}$	0.0005
$\Delta P_{g,F}$	0.0017
$\Delta P_{i,g}$	

Chemical Properties

CR	
FR	0
SR	1
AR	1
PR	

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	9.0
$\alpha_{+20/+300°C}$ [10^{-6}/K]	10.3
T_g [°C]	483
$T_{10^{13}}$ [°C]	501
$T_{10^{7.6}}$ [°C]	679
c_p [J/(g*K)]	0.790
λ [W/(m•K)]	1.000
ρ [g/cm³]	2.59
E [10^3 N/mm²]	68
µ	0.222
K [10^{-6} mm²/N]	
$HK_{0.1/20}$	510

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	0.8	1.5	2.2	-1.2	-0.6	0.1
+20/+40	0.6	1.4	2.1	-0.7	0.1	0.8
+60/+80	0.6	1.4	2.2	-0.5	0.3	1.1

Datasheet

LAK9G15
691548.353

n_d = 1.69064	ν_d = 54.76	$n_F - n_C$ = 0.012612
n_e = 1.69364	ν_e = 54.53	$n_{F'} - n_{C'}$ = 0.012721

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.65362
$n_{1970.1}$	1970.1	1.66043
$n_{1529.6}$	1529.6	1.66783
$n_{1060.0}$	1060.0	1.67552
n_t	1014.0	1.67639
n_s	852.1	1.67999
n_r	706.5	1.68462
n_C	656.3	1.68680
$n_{C'}$	643.8	1.68741
$n_{632.8}$	632.8	1.68798
n_D	589.3	1.69052
n_d	587.6	1.69064
n_e	546.1	1.69364
n_F	486.1	1.69941
$n_{F'}$	480.0	1.70013
n_g	435.8	1.70630
n_h	404.7	1.71205
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.287736670
B_2	0.518244853
B_3	26.175610900
C_1	0.005575419
C_2	0.0223679524
C_3	1892.25330000

Constants of Formula for dn/dT

D_0	2.19E-06
D_1	1.16E-08
D_2	-7.71E-12
E_0	4.82E-07
E_1	4.50E-10
λ_{TK} [µm]	0.193

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.480	0.160
2325	0.750	0.490
1970	0.963	0.910
1530	0.995	0.987
1060	0.998	0.996
700	0.994	0.986
660	0.993	0.982
620	0.991	0.978
580	0.989	0.973
546	0.985	0.964
500	0.971	0.930
460	0.920	0.810
436	0.800	0.570
420	0.630	0.320
405	0.380	0.090
400	0.290	0.040
390	0.120	0.010
380	0.030	0.000
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	46/38

Remarks

lead containing glass type

total allowable cross section of bubbles: 0,1mm² per 100 ccm

Relative Partial Dispersion P

$P_{s,t}$	0.2852
$P_{C,s}$	0.5400
$P_{d,C}$	0.3040
$P_{e,d}$	0.2383
$P_{g,F}$	0.5462
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2828
$P'_{C',s}$	0.5834
$P'_{d,C'}$	0.2533
$P'_{e,d}$	0.2362
$P'_{g,F'}$	0.4849
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	0.0205
$\Delta P_{C,s}$	0.0095
$\Delta P_{F,e}$	-0.0018
$\Delta P_{g,F}$	-0.0055
$\Delta P_{i,g}$	

Chemical Properties

CR	44593
FR	2
SR	53
AR	1.3
PR	4.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	6.3
$\alpha_{+20/+300°C}$ [10^{-6}/K]	7.6
T_g [°C]	634
$T_{10^{13}}$ [°C]	635
$T_{10^{7.6}}$ [°C]	710
c_p [J/(g*K)]	0.660
λ [W/(m•K)]	0.880
ρ [g/cm³]	3.53
E [10^3 N/mm²]	108
µ	0.288
K [10^{-6} mm²/N]	1.86
$HK_{0.1/20}$	721

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	3.0	3.8	4.5	0.7	1.5	2.1
+20/+40	3.0	3.9	4.7	1.5	2.4	3.2
+60/+80	3.2	4.1	5.0	2.0	2.9	3.8

Datasheet

LF5G19
597399.330

n_d = 1.59655 ν_d = 39.89 $n_F - n_C$ = 0.014954
n_e = 1.60010 ν_e = 39.60 $n_{F'} - n_{C'}$ = 0.015153

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.56416
$n_{1970.1}$	1970.1	1.56890
$n_{1529.6}$	1529.6	1.57419
$n_{1060.0}$	1060.0	1.58045
n_t	1014.0	1.58125
n_s	852.1	1.58477
n_r	706.5	1.58970
n_C	656.3	1.59214
$n_{C'}$	643.8	1.59284
$n_{632.8}$	632.8	1.59349
n_D	589.3	1.59642
n_d	587.6	1.59655
n_e	546.1	1.60010
n_F	486.1	1.60710
$n_{F'}$	480.0	1.60799
n_g	435.8	1.61578
n_h	404.7	1.62330
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.346113270
B_2	0.142428018
B_3	0.900477176
C_1	0.009717439
C_2	0.0501911619
C_3	111.95970300

Constants of Formula for dn/dT

D_0	-8.15E-06
D_1	1.34E-08
D_2	-9.22E-12
E_0	8.57E-07
E_1	8.26E-10
λ_{TK} [µm]	0.243

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.530	0.200
2325	0.630	0.320
1970	0.870	0.710
1530	0.992	0.979
1060	0.999	0.998
700	0.997	0.993
660	0.995	0.987
620	0.993	0.983
580	0.991	0.977
546	0.986	0.966
500	0.973	0.930
460	0.930	0.830
436	0.820	0.610
420	0.660	0.350
405	0.380	0.090
400	0.280	0.040
390	0.090	
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ80 / λ5	45/39

Remarks

lead containing glass type

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2355
$P_{C,s}$	0.4930
$P_{d,C}$	0.2946
$P_{e,d}$	0.2370
$P_{g,F}$	0.5803
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.2324
$P'_{C',s}$	0.5322
$P'_{d,C'}$	0.2451
$P'_{e,d}$	0.2339
$P'_{g,F'}$	0.5139
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0056
$\Delta P_{C,s}$	-0.0028
$\Delta P_{F,e}$	0.0009
$\Delta P_{g,F}$	0.0036
$\Delta P_{i,g}$	

Chemical Properties

CR	44622
FR	2
SR	3.4
AR	2.2
PR	3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	10.7
$\alpha_{+20/+300°C}$ [10^{-6}/K]	11.4
T_g [°C]	474
$T_{10^{13}}$ [°C]	462
$T_{10^{7.6}}$ [°C]	606
c_p [J/(g*K)]	0.580
λ [W/(m•K)]	0.750
ρ [g/cm³]	3.30
E [10^3 N/mm²]	56
µ	0.242
K [10^{-6} mm²/N]	2.80
$HK_{0.1/20}$	410
HG	2

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	-2.1	-0.9	0.4	-4.2	-3.1	-1.8
+20/+40	-2.0	-0.7	0.8	-3.3	-2.1	-0.6
+60/+80	-1.8	-0.3	1.3	-2.8	-1.4	0.1

Datasheet

SF6G05
809253.520

n_d = 1.80906 ν_d = 25.27 $n_F - n_C$ = 0.032015
n_e = 1.81661 ν_e = 25.07 $n_{F'} - n_{C'}$ = 0.032570

Refractive Indices

	λ [nm]	
$n_{2325.4}$	2325.4	1.75661
$n_{1970.1}$	1970.1	1.76163
$n_{1529.6}$	1529.6	1.76797
$n_{1060.0}$	1060.0	1.77741
n_t	1014.0	1.77879
n_s	852.1	1.78524
n_r	706.5	1.79491
n_C	656.3	1.79988
$n_{C'}$	643.8	1.80131
$n_{632.8}$	632.8	1.80265
n_D	589.3	1.80878
n_d	587.6	1.80906
n_e	546.1	1.81661
n_F	486.1	1.83190
$n_{F'}$	480.0	1.83387
n_g	435.8	
n_h	404.7	
n_i	365.0	
$n_{334.1}$	334.1	
$n_{312.6}$	312.6	
$n_{296.7}$	296.7	
$n_{280.4}$	280.4	
$n_{248.3}$	248.3	

Constants of Dispersion Formula

B_1	1.621139420
B_2	0.506586092
B_3	10.403229800
C_1	0.011347899
C_2	0.0535840223
C_3	1118.83658000

Constants of Formula for dn/dT

D_0	6.90E-06
D_1	1.76E-08
D_2	-3.17E-11
E_0	1.89E-06
E_1	1.50E-09
λ_{TK} [µm]	0.256

Internal Transmittance τ_i

λ [nm]	τ_i [10mm]	τ_i [25mm]
2500	0.850	0.660
2325	0.880	0.720
1970	0.965	0.910
1530	0.995	0.987
1060	0.998	0.994
700	0.985	0.962
660	0.980	0.950
620	0.972	0.930
580	0.958	0.900
546	0.920	0.810
500	0.640	0.330
460	0.090	0.080
436		
420		
405		
400		
390		
380		
370		
365		
350		
334		
320		
310		
300		
290		
280		
270		
260		
250		

Color Code

λ70 /λ5	52/46

Remarks

lead containing glass type

suitable for precision molding

Relative Partial Dispersion P

$P_{s,t}$	0.2013
$P_{C,s}$	0.4574
$P_{d,C}$	0.2866
$P_{e,d}$	0.2358
$P_{g,F}$	0.6121
$P_{i,h}$	

Relative Partial Dispersion P'

$P'_{s,t}$	0.1979
$P'_{C',s}$	0.4933
$P'_{d,C'}$	0.2380
$P'_{e,d}$	0.2318
$P'_{g,F'}$	0.5409
$P'_{i,h}$	

Deviation of Rel. Partial Disp. ΔP from the normal line

$\Delta P_{C,t}$	-0.0062
$\Delta P_{C,s}$	-0.0044
$\Delta P_{F,e}$	0.0025
$\Delta P_{g,F}$	0.0108
$\Delta P_{i,g}$	

Chemical Properties

CR	4
FR	3
SR	51.3
AR	2.3
PR	3.3

Other Properties

$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.8
$\alpha_{+20/+300°C}$ [10^{-6}/K]	8.8
T_g [°C]	427
$T_{10^{13}}$ [°C]	
$T_{10^{7.6}}$ [°C]	529
c_p [J/(g*K)]	
λ [W/(m•K)]	
ρ [g/cm³]	5.20
E [10^3 N/mm²]	
µ	
K [10^{-6} mm²/N]	
$HK_{0.1/20}$	360

Temperature Coefficients of the Refractive Index

	$\Delta n_{rel}/\Delta T$ [10^{-6}/K]			$\Delta n_{abs}/\Delta T$ [10^{-6}/K]		
[°C]	1060.0	e	g	1060.0	e	g
-40/-20	6.4	10.3		4.0	7.8	
+20/+40	7.0	11.4		5.5	9.8	
+60/+80	7.5	12.1		6.3	10.9	

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